Oil, Paint and Drug Reporter

VOL. LXII. No. 19. NEW YORK, MONDAY, NOVEMBER 10, 1902 FOR RATES SEE PAGE 7.

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LEHN & FINK, - New York

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COD LIVER OIL, LOFOTEN
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Extra Refined Wood Alcohol, Oil of Vitriol
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PRICE LIST.

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Special Refined 97%	70c.	" "
COLUMBIAN SPIRIT A pure methyl alcohol.	1.50	" "

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PIERCE & STEVENS	Buffalo, N. Y.
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MERRIMAC CHEMICAL CO.	75 and 77 Broad St., Boston, Mass.
MARTIN THAYER	50 Central St., Boston, Mass.
M. L. BARRETT & CO.	219 Lake St., Chicago, Ill.
F. W. THURSTON & CO.	29 River St., Chicago, Ill.
PAUL A. DAVIS, JR.	136 N. Water St., Philadelphia, Pa.
A. L. WEBB & SONS	Baltimore, Md.
C. B. LYON & BRO.	St. Paul, Minn.
ABNER HOOD	Kansas City, Mo.
RICHARDSON DRUG CO.	Omaha, Neb.
W. A. HOVER & CO.	Denver, Colo.
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HIGH GRADE OXIDES, INDIAN, TUSCAN and VENETIAN REDS,
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All colors having exceptional Brilliancy and Velvety Texture and absolutely free from Acid.
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Plumbago, Kauri Gum, Manila Gum,
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Galena Oils are the standard railway lubricants of America.

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Galena Oils are manufactured exclusively by Galena Oil Company.

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Sell the Finest Grade of Stove Naphtha for

VAPOR STOVES

The disagreable features connected with cooking are done away with by the use of a **Vapor Stove.**

There is no kindling to prepare, no ashes to remove and no waiting for sufficient heat.

Its full power is instantly developed and ceases at your touch

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Its fuel cost is less than **One-Half Cent** per **Hour.**

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25 Boulevard Haussman, Paris, France.
Collins & William Streets, Melbourne, Australia.
21 Strand Road, Calcutta, India.

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Petroleum Lubricants

OF GREAT BODY OR VISCOSITY AND HIGH FLASH.

Pale Spindle, Machinery and Engine Oils.

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RAILROAD ENGINE AND CAR OILS

300° MINERAL COLZA OIL

CYLINDER OILS

LUBRICATING GREASES

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OIL CITY, PA.	PITTSBURGH, PA.	BAYONNE, N. J.	HUNTER'S POINT, N. Y.	PARKERSBURG, W. VA.

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WOULD FIND IT TO THEIR ADVANTAGE TO ADVERTISE IN THESE COLUMNS.

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REFINERS OF

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3 Adelaide Place, London Bridge, London, Eng.
18 St. Ann Street, Manchester, Eng.
57 West Nile Street, Glasgow, Scotland.
4 Rue Chanchat, Paris, France.
52 Dovenhof, Hamburg, Germany.

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Manufacturers of CAR and AXLE GREASE

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Put up in Cakes, WITH BLUE WRAPPER, Full Directions and Useful Suggestions in each Package.

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Standard Floor Dressing
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Diamond Axle Grease
New York Carriage Grease
Petrolatum
Petrolatum Oil

STANDARD OIL CO. OF NEW YORK SPECIALTY DEPARTMENT, No. 666 HUDSON ST NEW YORK.

Directory for Buyers.

This list is intended to assist buyers in quickly ascertaining who are headquarters for everything in the Chemical, Drug, Oil, Paint, Dyestuffs, Fertilizers, Naval Stores and allied trades, also Machinery manufacturers. The names given in this list are those of representative concerns, and it is respectfully requested, when communicating with any of them, that the fact that the name was taken from this list be mentioned. For Machinery advertisements see page 23.

ACETANILID.

C. Bischoff & Co., 88 Park Place, New York.
Merck & Co., New York.
N. Y. Quinine & Chemical Works, New York.
R. W. Phair, 16 Platt St., New York.
Roessler & Hasslacher Chemical Co., 100 William St., New York.

ACETATE OF ALUMINA.

F. Bredt & Co., 194 Fulton St., N. Y.
Merrimac Chem. Co., 75-77 Broad St., Boston.
The Selling Co., 182 Front St., New York.

ACETATE OF LEAD.

F. Bredt & Co., 194 Fulton St., New York.
General Chem. Co., 25 Broad St., New York.

ACETATE OF SODA.

J. A. & W. Bird & Co., 88 Wall St., N. Y.
Cochrane Chemical Co., 55 Kilby St., Boston.
General Chem. Co., 25 Broad St., New York.
Grasselli Chemical Co., Cleveland and N. Y.
Merrimac Chem. Co., 75-77 Broad St., Boston.
Roessler & Hasslacher Chemical Co., 100 William St., New York.
The Selling Co., 182 Front St., New York.

ACETIC ACID.

J. A. & W. Bird & Co., 88 Wall St., N. Y.
General Chem. Co., 25 Broad St., New York.
Grasselli Chemical Co., Cleveland and N. Y.
Harrison Bros. & Co., Inc., Philadelphia.
Merrimac Chem. Co., 75-77 Broad St., Boston.
Roessler & Hasslacher Chemical Co., 100 William St., New York.
The Selling Co., 182 Front St., New York.

ALIZARINE COLORS.

F. E. Atteaux & Co., 174-176 Purchase St., Boston.
Berlin Aniline Works, 213 Water St., N. Y.
Brunner, Mond & Co., Ltd., Northwish, Eng.
Cassela Color Co., 182 Front St., New York.
A. Klipstein & Co., 122 Pearl St., New York.
Victor Koechl & Co., 122 Hudson St., N. Y.
Kuttroff, Pickhardt & Co., 128 Duane St., N.Y.
Arnold, Hoffman & Co., Inc., Providence.

ALKALI.

Hollingsworth & Peterson, 653 Bourse, Phila.
Linder & Meyer, 89 State St., Boston.
The Selling Co., 182 Front St., New York.
Solvay Process Co., Syracuse and New York.
Wing & Evans, 22 William St., New York.
Isaac Winkler & Bro., Cincinnati, Ohio.

ALUM.

Cochrane Chemical Co., 55 Kilby St., Boston.
General Chem. Co., 25 Broad St., New York.
Harrison Bros. & Co., Inc., Philadelphia.
Kuttroff, Pickhardt & Co., 128 Duane St., N.Y.
Merrimac Chem. Co., 75-77 Broad St., Boston.
Penna. Salt Mfg. Co., 115 Chestnut St., Phila.
The Selling Co., 182 Front St., New York.

ALUMINA.

Cochrane Chemical Co., 55 Kilby St., Boston.
General Chem. Co., 25 Broad St., New York.
Harrison Bros. & Co., Inc., Philadelphia.
A. Klipstein & Co., 122 Pearl St., New York.
Kuttroff, Pickhardt & Co., 128 Duane St., N.Y.
Penna. Salt Mfg. Co., 115 Chestnut St., Phila.
Roessler & Hasslacher Chemical Co., 100 William St., New York.

AMMONIA NITRATE, PURE AND COM'L.

Geo. A. Erkenbrach, 115 Maiden Lane, N. Y.

AMYL ACETATE.

Albany Chemical Co., Albany, N. Y.
Chas. Cooper & Co., 194 Worth St., New York.
Maas & Waldstein, 107 Murray St., New York.
Schoellkopf, Hartford & Hanna Co., Buffalo and New York.

ANILINES.

F. E. Atteaux & Co., Boston.
Berlin Aniline Works, 213 Water St., N. Y.
J. A. & W. Bird & Co., 88 Wall St., N. Y.
C. Bischoff & Co., 88 Park Place, New York.
F. Bredt & Co., 194 Fulton St., N. Y.
Cassela Color Co., 182 Front St., N. Y.
Heller & Merz Co., 22 Cliff St., N. Y.
Howe, Fuller & Trunkett, 157 Federal St., Boston.
Victor Koechl & Co., 122 Hudson St., N. Y.
A. Klipstein & Co., 122 Pearl St., New York.
Kuttroff, Pickhardt & Co., 128 Duane St., N.Y.
Schoellkopf, Hartford & Hanna Co., Buffalo and New York.

AQUA AMMONIA.

Cochrane Chemical Co., 55 Kilby St., Boston.
Columbia Chemical Works, 43 Sedgwick St., Brooklyn.
Geo. A. Erkenbrach, 115 Maiden Lane, N. Y.
General Chem. Co., 25 Broad St., New York.
Grasselli Chemical Co., Cleveland and N. Y.
Harrison Bros. & Co., Inc., Philadelphia.
Heller, Hirsh & Co., 62 William St., N. Y.
Merrimac Chem. Co., 75-77 Broad St., Boston.
John C. Wiarda & Co., Brooklyn, N. Y.

ARSENIC.

Binney & Smith Co., 81 Fulton St., New York.
C. Bischoff & Co., 88 Park Place, New York.
Harshaw, Fuller & Goodwin Co., Cleveland, O.
Edw. Hill's Son & Co., 27 Cedar St., N. Y.
A. Klipstein & Co., 122 Pearl St., New York.
Victor Koechl & Co., 122 Hudson St., N. Y.
McKesson & Robbins, 91 Fulton St., N. Y.
Roessler & Hasslacher Chemical Co., 100 William St., New York.
Schoellkopf, Hartford & Hanna Co., Buffalo and New York.
John C. Wiarda & Co., Brooklyn, N. Y.
Isaac Winkler & Bro., Cincinnati, O.

ASPHALTUM.

John S. Lamson & Bro., 77 Maiden Lane, N.Y.
Melchior, Armstrong & Dessau, 32 Broadway

BARIUM HYDRATE.

United Barium Co., 44 Broad St., New York.

BARYTES.

Geo. G. Blackwell, Sons & Co., Ltd., The Albany, Liverpool, Eng.
Clarke & White Co., 106 Fulton St., N. Y.
Gabriel & Schall, 205 Pearl St., New York.
Nulsen Klein & Krausse Mfg. Co., St. Louis.

BEESWAX.

J. A. & W. Bird & Co., 88 Wall St., N. Y.
W. H. Bowdlear & Co., Boston, Mass.
Smith & Nichols, 145 Front St., New York.
Tidewater Oil Co., 12 Broadway, New York.

BI-CARB, SODA.

Church & Dwight Co., 84-85 Wall St., N. Y.
Diamond Soda Works, Milwaukee, Wis.
Edward Hill's Son & Co., 26 Cedar St., N. Y.
Penna. Salt Mfg. Co., 115 Chestnut St., Phila.

BICHROMATE OF POTASH.

Fergusson Bros., Philadelphia.
The Roessler & Hasslacher Chemical Co., 100 William St., New York.
The Selling Co., 182 Front St., New York.

BISULPHIDE OF CARBON.

Chas. Cooper & Co., 194 Worth St., New York.
Geo. A. Erkenbrach, 115 Maiden Lane, N. Y.
E. R. Taylor, Penn Yan, N. Y.

BISULPHADE OF SODA.

J. A. & W. Bird & Co., 88 Wall St., N. Y.
Cochrane Chemical Co., 55 Kilby St., Boston.
General Chem. Co., 25 Broad St., New York.
Grasselli Chemical Co., Cleveland and N. Y.
Kuttroff, Pickhardt & Co., 128 Duane St., N. Y.
Merrimac Chem. Co., 75-77 Broad St., Boston
The Selling Company, 182 Front St., N. Y.

BLEACHING POWDER.

Acker Process Co., Niagara Falls, N. Y.
Arnold, Hoffman & Co., Inc., Providence.
J. A. & W. Bird & Co., 88 Wall St., N. Y.
The Dow Chemical Co., Midland, Mich.
Fergusson Bros., Philadelphia.
Fuerst Bros. & Co., 2 Stone St., New York.
Edward Hill's Sons & Co., 27 Cedar St., N. Y.
Hollingsworth & Peterson, Philadelphia.
A. Klipstein & Co., 122 Pearl St., New York.
James Lee & Co., 76 William St., New York.
Linder & Meyer, 89 State St., Boston.
J. L. & D. S. Riker, 46 Cedar St., New York.
Roessler & Hasslacher Chemical Co., 100 William St., New York.
Wing & Evans, 22 William St., New York.
Isaac Winkler & Bro., Cincinnati, Ohio.

BLUE VITRIOL.

J. A. & W. Bird & Co., 88 Wall St., N. Y.
Fergusson Bros., Philadelphia.
General Chem. Co., 25 Broad St., New York.
Grasselli Chemical Co., Cleveland and N. Y.
Penna. Salt Mfg. Co., 115 Chestnut St., Phila.
The Roessler & Hasslacher Chemical Co., 100 William St., New York.
The Selling Company, 182 Front St., N. Y.

BONE BLACK.

Binney & Smith Co., 81 Fulton St., New York.
Lister's Agri. Chem. Wks., 26 B'way, N. Y.
Michigan Carbon Works, Detroit, Mich.
Seaver & Co., 120 Milk St., Boston.
Wegelin & Wilckes Black Mfg. Co., 50 Cliff St., New York.

BORACIC ACID.

Pacific Coast Borax Co., 100 William St., N. Y.
Chas. Pfizer & Co., New York.
Roessler & Hasslacher Chemical Co., 100 William St., New York.
John C. Wiarda & Co., Brooklyn, N. Y.

BORAX.

Pacific Coast Borax Co., 100 William St., N. Y.
Chas. Pfizer & Co., New York.
The Roessler & Hasslacher Chemical Co., 100 William St., New York.
John C. Wiarda & Co., Brooklyn, N. Y.

BRONZE POWDER AND GOLD LEAF.

Oscar Schlegel, 186 Grand St., New York.

CALCIUM CHLORIDE.

Carbondale Chemical Co., Carbondale, Pa.
J. H. Schoneberger, Columbus, O.
Wing & Evans, 22 William St., New York.

CAMPHOR.

American Camphor Refining Co., 14 Fulton St., Boston, and 5 Platt St., New York.
H. J. Baker & Bro., 100 William St., N. Y.
Chas. Pfizer & Co., New York.

CANDLES.

F. L. Young & Kimball, New Bedford, Mass.

CARBOLIC ACID.

Barrett Mfg. Co., Philadelphia.
Fuerst Bros. & Co., 2 Stone St., New York.
Kuttroff, Pickhardt & Co., 128 Duane St., N. Y.
Lehn & Fink, 120 William St., New York.
McKesson & Robbins, New York.
Merck & Co., New York.
Schieffelin & Co., 172 William St., New York.
Schoellkopf, Hartford & Hanna Co., Buffalo and New York.

CARBONATE OF AMMONIA.

Michigan Carbon Works, Detroit.

CARBONATE OF POTASH.

J. A. & W. Bird & Co., 88 Wall St., N. Y.
Fergusson Bros., Philadelphia.
Fuerst Bros. & Co., 2 Stone St., New York.
Edw. Hill's Son & Co., 27 Cedar St., N. Y.
A. Klipstein & Co., 122 Pearl St., New York.
Kuttroff, Pickhardt & Co., 128 Duane St., N. Y.
James Lee & Co., 76 William St., New York
The Roessler & Hasslacher Chemical Co., 100 William St., New York.
Louis de Vriendt, Antwerp, Belgium.
John C. Wiarda & Co., Brooklyn, N. Y.
Isaac Winkler & Bro., Cincinnati, Ohio.

CARBON BLACK.

Binney & Smith Co., 81 Fulton St., New York.
Godfrey L. Cabot, 100 Broad St., Boston, Mass.
Seaver & Co., 120 Milk St., Boston.
Wegelin & Wilckes Black Mfg. Co., 50 Cliff St., New York.

CASCARA.

S. Heitshu & Co., 65 Front St., Portland, Ore.
Lehn & Fink, 120 William St., New York.
McKesson & Robbins, New York.

CASTOR OIL.

H. J. Baker & Bro., 100 William St., N. Y.
Fuerst Bros. & Co., 2 Stone St., New York.
National Lead Co., 100 William St., New York.

CAUSTIC SODA.

Acker Process Co., Niagara Falls, N. Y.
Arnold, Hoffman & Co., Inc., Providence.
J. A. & W. Bird & Co., 88 Wall St., N. Y.
Fergusson Bros., Philadelphia.
Fuerst Bros. & Co., 2 Stone St., New York.
General Chem. Co., 25 Broad St., New York.
Edward Hill's Son Co., 25 Cedar St., N. Y.
Hollingsworth & Peterson, 653 Bourse, Phila.
A. Klipstein & Co., 122 Pearl St., New York
James Lee & Co., 76 William St., New York.
Linder & Meyer, 89 State St., Boston.
Penna. Salt Mfg. Co., 115 Chestnut St., Phila
Welch & Welch, 121 Broad St., New York.
John C. Wiarda & Co., Brooklyn, N. Y.
Wing & Evans, 22 William St., New York.
Isaac Winkler & Bro., Cincinnati, Ohio.

CHALK.

Charles Earl Currie & Co., Louisville, Ky.

CHEMISTS—EXPERT.

Dr. Peter T. Austen, 80 Broad St., New York

CHINA CLAY.

The Atlas Co., Lincoln, N. J.
Fuerst Bros. & Co., 2 Stone St., New York.
John C. Wiarda & Co., Brooklyn, N. Y.

CHLORATE OF POTASH.

Dilion & Co., 20 Cedar St., New York.
Fergusson Bros., Philadelphia.
A. Klipstein & Co., 122 Pearl St., New York
Kuttroff, Pickhardt & Co., 128 Duane St., N. Y
Linder & Meyer, 89 State St., Boston.
R. W. Phair, 16 Platt St., New York.
J. L. & D. S. Riker, 46 Cedar St., New York
Roessler & Hasslacher Chemical Co., 100 William St., New York.
Rogers & Pyatt, 78 Maiden Lane, New York
Schoellkopf, Hartford & Hanna Co., Buffalo and New York
Louis de Vriendt, Antwerp, Belgium.

CHLORATE OF SODA.

A. Klipstein & Co., 122 Pearl St., New York.
Kutroff, Pickhardt & Co., 128 Duane St., N. Y.
J. L. & D. S. Riker, 46 Cedar St., New York.

CHLORIDE OF ZINC.

Berlin Aniline Works, 213 Water St., N. Y.
J. A. & W. Bird & Co., 88 Wall St., N. Y.
Cochrane Chemical Co., 55 Kilby St., Boston.
General Chemical Co., 25 Broad St., New York.
Grasselli Chemical Co., Cleveland and N. Y.
A. Klipstein & Co., 122 Pearl St., New York.
Roessler & Hasslacher Chemical Co., 100 William St., New York.

CHLOROFORM.

Albany Chemical Co., Albany, N. Y.
Mallinckrodt Chemical Works, St. Louis Mo.
Merck & Co., New York.
N. Y. Quinine & Chemical Works, New York.
Powers & Weightman, Philadelphia.
Roessler & Hasslacher Chemical Co., 100 William St., New York.

COAL TAR OILS.

Barrett Mfg. Co., Philadelphia.
Wegelin & Wilckes Black Mfg. Co., 50 Cliff St., New York.

COAL TAR PRODUCTS.

F. E. Atteaux & Co., 174-176 Purchase St., Boston.
Barrett Mfg. Co., Philadelphia.
Berlin Aniline Works, 213 Water St., N. Y.
J. A. & W. Bird & Co., 88 Wall St., N. Y.
C. Bischoff & Co., 88 Park place, New York.
F. Bredt & Co., 194 Fulton St., N. Y.
A. Klipstein & Co., 122 Pearl St., New York.
Victor Koechl & Co., 122 Hudson St., N. Y.
Kuttroff, Pickhardt & Co., 128 Duane St., N. Y.
Roessler & Hasslacher Chemical Co., 100 William St., New York.
Schoellkopf, Hartford & Hanna Co., Buffalo and New York.
The Selling Company, 182-184 Front St., N. Y.
Wegelin & Wilckes Black Mfg. Co., 50 Cliff St., New York.

COCAINE.

C. Bischoff & Co., 88 Park Place, New York.
Mallinckrodt Chemical Works, St. Louis, Mo.
Merck & Co., New York.
N. Y. Quinine & Chemical Works, New York.
R. W. Phair & Co., 16 Platt St., New York.
Roessler & Hasslacher Chemical Co., 100 William St., New York.
Schieffelin & Co., 172 William St., New York.

COCOANUT OIL.

Fuerst Bros. & Co., 2 Stone St., New York.
Edw. Hill's Son & Co., 25-27 Cedar St., N. Y.
James Lee & Co., 76 William St., New York.
Paterson, Boardman & Co., 133 Front St., N. Y.
Welch & Welch, 121 Broad St., New York.
Isaac Winkler & Co., Cincinnati, O.

COD LIVER OIL.

A. W. Dodd & Co., Gloucester, Mass.
Isdahl & Co., Bergen, Norway.
Otto S. Jervell, Aalesund, Norway.
Lehn & Fink, 120 William St., New York.
Geo. H. Leonard & Co., Boston.
G. B. Martin, 95 William St., New York.
McKesson & Robbins, New York.
Schieffelin & Co., 172 William St., New York.

COLD WATER PAINT.

The Atlas Co., Lincoln, N. J.
J. A. & W. Bird Co., 88 Wall St., New York.
Columbia Refining Co., 32 B'way, New York.
Muralo Co., New Brighton, S. I., N. Y.

COPPERAS.

American Steel & Wire Co., Chicago and N. Y.
General Chemical Co., 25 Broad St., New York.
Harshaw, Fuller & Goodwin Co., Cleveland and New York.
Penna. Salt Mfg. Co., 115 Chestnut St., Phila.
Powers & Weightman, Philadelphia.
S. P. Wetherill Co., New York & Philadelphia.
C. K. Williams & Co., Easton, Pa.

CORN OIL.

Elbert & Gardner, 11 Broadway, New York.
P. C. Vis & Co., Amsterdam, Holland.
Welch & Welch, 121 Broad St., New York.

COTTONSEED OIL.

Alexander & Adams, 103 Produce Exchange, New York.
American Cotton Oil Co., 27 Beaver St., N. Y.
Elbert & Gardner, 11 Broadway, New York.
Globe Refinery Co., Louisville, Ky.
Kentucky Refining Co., Louisville, Ky.
Louisville Cotton Oil Co., Louisville, Ky.
Procter & Gamble Co., Cincinnati, O.
Southern Cotton Oil Co., 11 Broadway, N. Y.
Trinity Cotton Oil Co., Dallas, Tex.
P. C. Vis & Co., Amsterdam, Holland.
Welch & Welch, 121 Broad St., New York.

CREAM TARTAR.

Chas. Pfizer & Co., New York.
Tartar Chemical Co., 47 Cedar St., New York.

CRUDE DRUGS.

Dodge & Olcott, 86 William St., New York.
J. L. Hopkins & Co., 100 William St., N. Y.
Lehn & Fink, 120 William St., New York.
McKesson & Robbins, 92 Maiden Lane, N. Y.
Parke, Davis & Co., Detroit, Mich., and 92 Maiden Lane, N. Y.
Schieffelin & Co., New York.
Thurston & Braidich, 128 William St., N. Y.

DEGRAS.

A. Klipstein & Co., 122 Pearl St., New York.
Geo. H. Leonard & Co., Boston.
Alex. P. Mende & Co., 536 W. 14th St., N. Y.
Benj. R. Vickers & Sons, Leeds, England.
Louis de Vriendt, Antwerp, Belgium.

DOUBLE MANURE SALT.

German Kali Works, 93 Nassau St., N. Y.
Hamilton H. Salmon & Co., 88 Wall St., N. Y.

DRUG MILLERS.

J. L. Hopkins & Co., 100 William St., N. Y.

DRY COLORS.

Acme White Lead & Color Wks., Detroit, Mich.
American Steel & Wire Co., New York.
The Atlas Co., Lincoln, N. J.
Lewis Berger & Sons, 100 William St., N. Y.
J. A. & W. Bird Co., 88 Wall St., N. Y.
Geo. G. Blackwell, Sons & Co., Ltd., The Albany, Liverpool, England.
Cawley, Clark & Co., Newark, N. J.
Clarke & White Co., 106 Fulton St., N. Y.
The Cleveland Color Co., Cleveland, O.
Gabriel & Schall, 205 Pearl St., New York.
Harrison Bros. & Co., Inc., Philadelphia.
A. Klipstein & Co., 122 Pearl St., New York.
Kuttroff, Pickhardt & Co., 128 Duane St., N. Y.
Bruno Lampel, Cologne, Ehrenfeld-on-the-Rhine, Germany.
Merrimac Chem. Co., 75-77 Broad St., Boston.
Wm. F. Siemon & Co., 106 Fulton St., N. Y.
A. W. Smith, Ltd., 79 Duane St., New York.
J. Lee Smith & Co., 60 Frankfort St., N. Y.

DRY COLORS (Continued.)

Tooh Bros., 468 W. Broadway, N. Y.
R. J. Waddell & Co., 52 Beekman St., N. Y.
The S. P. Wetherill Co., New York & Phila.
C. K. Williams & Co., Easton, Pa.

DYESTUFFS.

Arnold, Hoffman & Co., Providence, R. I.
F. E. Atteaux & Co., 174-176 Purchase St., Boston.
Berlin Aniline Works, 213 Water St., N. Y.
J. A. & W. Bird & Co., 88 Wall St., N. Y.
C. Bischoff & Co., 88 Park Place, New York.
F. Bredt & Co., 194 Fulton St., N. Y.
Cassela Color Co., 182 Front St., N. Y.
E. Fassbender & Co., Rotterdam, Holland.
Hoople & Audrovette, 218 Fulton St., N. Y.
A. Klipstein & Co., 122 Pearl St., New York.
Victor Koechl & Co., 122 Hudson St., N. Y.
Kuttroff, Pickhardt & Co., 128 Duane St., N.Y.
John D. Lewis, 304 Exchange Pl., Providence.
Roger Schuitz & Co., Trieste, Austria.
Schoellkopf, Hartford & Hanna Co., Buffalo and New York.

DYEWOOD EXTRACTS.

F. E. Atteaux & Co., 174-176 Purchase St., Boston.
Howe, Fuller & Trunkett, 157 Federal St., Boston.
A. Klipstein & Co., 122 Pearl St., New York.
Kuttroff, Pickhardt & Co., 128 Duane St., N.Y.
John D. Lewis, Providence, R. I.
Geo. H. Leonard & Co., Boston.
The Sharpless Dyewood Extract Co., 648-651 Bourse, Philadelphia.

ESSENTIAL OILS.

Arthur A. Barrett, Messina, Sicily.
Berlin Aniline Works, 213 Water St., N. Y.
Antoine Chiris, 18-20 Platt St., New York.
F. A. Corio, Messina, Sicily.
Dodge & Olcott, 86 William St., New York.
P. R. Dreyer, 68 Broad St., New York.
Fuerst Bros. & Co., 2 Stone St., New York.
D. W. Hutchinson, 8 Cedar St., New York.
Lehn & Fink, 120 William St., New York.
Magnus & Lauer, 92 Pearl St., New York.
McKesson & Robbins, New York.
F. M. Rudd, Bronson, Mich.
Schieffelin & Co., 172 William St., New York.
Sozio & Androli, Grasse, France.
A. M. Todd, Kalamazoo, Mich.

ETHERS.

Chas. Cooper & Co., 194 Worth St., New York.
Geo. A. Erkenbrach, 115 Maiden Lane, N. Y.
Powers & Weightman, Philadelphia.

FERTILIZING MATERIALS.

Chilean Nitrate Works, 12 John St., N. Y.
Lister's Agri. Chem. Works, 26 B'way, N. Y.
German Kali Works, 93 Nassau St., New York.
H. H. Salmon & Co., 88 Wall St., New York.

FORMALDEHYDE.

J. A. & W. Bird & Co., 88 Wall St., N. Y.
Fries Bros., 92 Reade St., New York.
A. Klipstein & Co., 122 Pearl St., New York.
Victor Koechl & Co., 122 Hudson St., N. Y.
Merck & Co., New York.
Roessler & Hasslacher Chemical Co., 100 William St., New York.

FULLER'S EARTH.

Fuerst Bros. & Co., 2 Stone St., New York.

FUSEL OIL.

Albany Chemical Co., Albany, N. Y.
Maas & Waldstein, 107 Murray St., New York.
Schoellkopf, Hartford & Hanna Co., Buffalo and New York.
Louis de Vriendt, Antwerp, Belgium.

GASOLINE.

Crew Levick Company, Philadelphia.
Standard Oil Co., 26 Broadway, New York.
The Paragon Refining Co., Toledo.

GELATINE.

Michigan Carbon Works, Detroit.

GLAUBER SALTS.

The Cochrane Chem. Co., 55 Kilby St., Boston.
General Chem. Co., 25 Broad St., New York.
Grasselli Chemical Co., Cleveland and N. Y.
Wm. F. Jobbins, Aurora, Ill.
Merrimac Chem. Co., 75-77 Broad St., Boston.
John C. Wiarda & Co., Brooklyn, N. Y.

GLUE.

Arabol Mfg. Co., 155 William St., New York.
Lister's Agri. Chem. Works, 26 B'way, N. Y.
Michigan Carbon Works, Detroit.
Rogers & Pyatt, 78 Maiden Lane, New York.

GLYCERINE.

J. A. & W. Bird & Co., 88 Wall St., N. Y.
Harshaw, Fuller & Goodwin Co., Cleveland, O.
Grasselli Chemical Co., Cleveland and N. Y.
Wm. F. Jobbins, Aurora, Ill.
Joslin, Schmidt & Co., Cincinnati, O.
A. Klipstein & Co., 122 Pearl St., New York.
Procter & Gamble Co., Cincinnati, O.
Schrameck & Co., 1 Place Boieldieu, Paris.
Louis de Vriendt, Antwerp, Belgium.

GUMS.

Arnold, Hoffman & Co., Providence, R. I.
F. Bredt & Co., 194 Fulton St., N. Y.
Herm. A. Holstein, Constantinople, Turkey.
Alfred A. Keun & Co., Smyrna, Turkey.
Lehn & Fink, 120 William St., New York.
McKesson & Robbins, 91 Fulton St., New York.
Parke, Davis & Co., 90 Maiden Lane, N. Y.
Roger Schultz & Co., Trieste, Austria.
Schieffelin & Co., 172 William St., New York.
D. Steengrafe, 56 Pine St., New York.
Thurston & Braidich, 128 William St., N. Y.

HYDROFLUORIC ACID.

General Chem. Co., 25 Broad St., New York.
Harshaw, Fuller & Goodwin Co., Cleveland.
John C. Wiarda & Co., Brooklyn, N. Y.

HYPOSULPHITE OF SODA.

F. E. Atteaux & Co., Boston, Mass.
The Cochrane Chem. Co., 55 Kilby St., Boston.
Grasselli Chemical Co., Cleveland and N. Y.
A. Klipstein & Co., 122 Pearl St., New York.
Kuttroff, Pickhardt & Co., 128 Duane St., N.Y.
James Lee & Co., 76 William St., New York.
Merrimac Chem. Co., 75-77 Broad St., Boston.
Roessler & Hasslacher Chemical Co., 100 William St., New York.
The Selling Co., 182 Front St., New York.

ILLUMINATING OILS.

Atlantic Refining Co., Reading.
Crew Levick Co., Philadelphia.
Freedom Oil Works Co., Freedom, Pa.
Standard Oil Co., New York.
The Paragon Refining Co., Toledo, O.
Union Petroleum Co., 109 S. Fourth St., Phila.

INDIGO.
Arnold, Hoffman & Co., Inc., Providence, R. I.
General Chem. Co., 25 Broad St., New York.
Howe, Fuller & Trunkett, 157 Federal St., Boston.
A. Klipstein & Co., 122 Pearl St., New York.
Victor Koechl & Co., 122 Hudson St., N. Y.
Kuttroff, Pickhardt & Co., 128 Duane St., N. Y.
Taylor & Barker, Lowell, Mass.

IVORY AND DROP BLACK.
Seaver & Co., 120 Milk St., Boston.

LAMP WICKS.
Fletcher Manufacturing Co., Providence, R. I.
Standard Oil Co., 26 Broadway, New York.

LAMP BLACK.
Bihn & Wolff Co., Bridesburg, Phila., Pa.
Binney & Smith Co., 81 Fulton St., New York.
Seaver & Co., 120 Milk St., Boston.
D. F. Tiemann & Co., 44 Duane St., N. Y.
Wegelin & Wilckes Black Mfg. Co., 50 Cliff St., New York.

LEAD PIPE AND SHEET LEAD.
Atlantic White Lead and Linseed Oil Co., 100 William St., New York.
Colwell Lead Co., 63 Center St., New York.
Union Lead & Oil Co., 32 Liberty St., N. Y.

LINSEED OIL.
American Linseed Co., 100 William St., N. Y.
Atlantic White Lead and Linseed Oil Co., 100 William St., New York.
Euston & Co., Chicago.
National Lead Co., 100 William St., New York.
Spencer Kellogg, Buffalo, N. Y.
Thresher Varnish Co., Dayton, O.
A. L. Webb & Sons, Baltimore, Md.

LITHARGE.
Davis Lead Co., Pittsburgh, Pa.
Electrical Lead Reduction Co., Bourse Bldg., Philadelphia, and 71 Broadway, New York.

LITHOPONE.
Grasselli Chemical Co., Cleveland and N. Y.
Gabriel & Schall, 205 Pearl St., New York.

LUBRICATING OILS.
Crew Levick Co., Philadelphia.
Freedom Oil Works Co., Freedom, Pa.
Galena Oil Company, Franklin, Pa.
Signal Oil Co., Franklin, Pa.

MANGANESE.
Geo. G. Blackwell, Sons & Co., Ltd., The Albany, Liverpool, England.
Harshaw, Fuller & Goodwin Co., Cleveland and New York.
Kendall & Filck, Washington, D. C.
A. Klipstein & Co., 122 Pearl St., New York.
Jno. S. Lamson & Bro., 77 Maiden Lane, N. Y.
James Lee & Co., 76 William St., New York.
Roessler & Hasslacher Chemical Co., 100 William St., New York.
John C. Wiarda & Co., Brooklyn, N. Y.

MANUFACTURING CHEMISTS.
E. J. Beggs & Co., 101 Beekman St., N. Y.
Columbia Chem. Wks., 43 Sedgwick St., B'klyn.
Chas. Cooper Co., 194 Worth St., New York.
Geo. A. Erkenbrach, 115 Maiden Lane, N. Y
Fries Bros., 92 Reade St., New York.
General Chem. Co., 25 Broad St., New York.
Grasselli Chemical Co., Cleveland and N. Y.
Harrison Bros. Co., Inc., Philadelphia, Pa.
Harshaw, Fuller & Goodwin Co., Cleveland and New York.
A. Klipstein & Co., 122 Pearl St., New York.
Lehn & Fink, 120 William St., New York.
McKesson & Robbins, New York.
Merck & Co., New York.
Parke, Davis & Co., New York and Detroit.
Chas. Pfizer & Co., New York.
Roessler & Hasslacher Chemical Co., 100 William St., New York.
Rosengarten & Sons, Philadelphia.
Schieffelin & Co., 172 William St., New York.
Seidner & Enequist, Leonard and Richardson Sts., Brooklyn, N. Y.
The Selling Company, 182-184 Front St., N. Y.
John C. Wiarda & Co., Brooklyn, N. Y.

MENHADEN OIL.
Geo. H. Leonard & Co., Boston.
W. A. Robinson & Co., New Bedford, Mass.
Frank L. Young & Kimball, New Bedford, Mass.

MISCELLANEOUS.
M. J. Title Guarantee & Trust Co., Jersey City, N. J.
N. Y. Central & Hudson River R. R.
The Tanite Co., Stroudsburg, Pa.

MORPHINE.
Merck & Co., New York.
N. Y. Quinine & Chemical Works, New York.
Powers & Weightman, Philadelphia.
Rosengarten & Sons, Philadelphia.
Zimmer & Co., Frankfort-on-Main, Germany.

MURIATIC ACID.
Cochrane Chemical Co., 55 Kilby St., Boston.
Chas. Cooper & Co., 194 Worth St., New York.
General Chem. Co., 25 Broad St., New York.
Grasselli Chemical Co., Cleveland and N. Y.
Merrimac Chem. Co., 75-77 Broad St., Boston.
Penna. Salt Mfg. Co., 115 Chestnut St., Phila.
Powers & Weightman, Philadelphia.

MYRBANE.
Barrett Mfg. Co., Philadelphia.
Berlin Aniline Works, 72 Front St., New York.
The Selling Company, 182-184 Front St., N. Y.

NAPHTHA.
Barrett Mfg. Co., Philadelphia.
Crew Levick Company, Philadelphia.
Standard Oil Co., New York.
The Paragon Refining Co., Toledo, O.

NAPHTHALINE.
Barrett Mfg. Co., Philadelphia.
The Roessler & Hasslacher Chemical Co., 100 William St., New York.
Schoellkopf, Hartford & Hanna Co., Buffalo and New York.
Wegelin & Wilckes Black Mfg. Co., 50 Cliff St., New York.

NITRATE OF SODA.
Battelle & Renwick, 163 Front St., New York.
Chilean Nitrate Works, 12 John St., New York.
The Geo. F. Taylor Co., 80 Pine St., New York.

NITRIC ACID.
Chas. Cooper & Co., 194 Worth St., New York.
Cochrane Chemical Co., 55 Kilby St., Boston.
General Chem. Co., 25 Broad St., New York.
Grasselli Chemical Co., Cleveland and N. Y.
Harrison Bros. & Co., Inc., Philadelphia, Pa.
Merrimac Chem. Co., 75-77 Broad St., Boston.
Penna. Salt Mfg. Co., 115 Chestnut St., Phila.
Powers & Weightman, Philadelphia.

OCHER.
The Atlas Co., Lincoln, N. J.
Bass Paint Co., 108 Fulton St., New York.
J. A. & W. Bird & Co., 88 Wall St., N. Y.
Bruno Lampel, Cologne, Ehrenfeld-on-the-Rhine, Germany.
J. Lee Smith & Co., 59 Frankfort St., N. Y.
D. F. Tiemann & Co., 44 Duane St., New York.
C. K. Williams & Co., Easton, Pa.

OIL OF VITRIOL (Sulphuric Acid).
Cochrane Chemical Co., 55 Kilby St., Boston.
Chas. Cooper & Co., 194 Worth St., New York.
General Chem. Co., 608 Bourse, Philadelphia.
Grasselli Chemical Co., Cleveland and N. Y.
Harrison Bros. & Co., Inc., Philadelphia, Pa.
Kuttroff, Pickhardt & Co., 128 Duane St., N. Y.
Merrimac Chem. Co., 75-77 Broad St., Boston.
Mineral Point Zinc Co., 1104 Marquette Bldg., Chicago, Ill.
Penna. Salt Mfg. Co., 115 Chestnut St., Phila.
Powers & Weightman, Philadelphia.
T. P. Shepard & Co., Providence, R. I.

OLIVE OIL.
F. Bredt & Co., 194 Fulton St., N. Y.
A. W. Dodd & Co., Gloucester, Mass.
Fuerst Bros. & Co., 2 Stone St., New York.
Lehn & Fink, 120 William St., New York.
Geo. H. Leonard & Co., Boston.
Schieffelin & Co., 172 William St., New York.
Welch & Welch, 121 Broad St., New York.

OPIUM.
Edw. Hill's Son & Co., 25-27 Cedar St., N. Y.
Herm. A. Holstein, Constantinople, Turkey.
Alfred A. Kuen & Co., Smyrna, Turkey.
A. Lavino & Co., Smyrna (Asia Minor).
Merck & Co., New York.
N. Y. Quinine & Chemical Works, New York.
Powers & Weightman, New York and Phila.
Rosengarten & Sons, Philadelphia.
Schieffelin & Co., 172 William St., New York.
Thurston & Braidich, 128 William St., N. Y.

OXIDE OF ZINC.
J. A. & W. Bird & Co., 88 Wall St., N. Y.
Gabriel & Schall, 205 Pearl St., New York.
New Jersey Zinc Co., 11 Broadway, New York.
J. Lee Smith & Co., 59 Frankfort St., N. Y.
S. P. Wetherell Co., New York and Phila.

PALM OIL.
Elbert & Gardner, 11 Broadway, New York.
James Lee & Co., 76 William St., New York.
Welch & Welch, 121 Broad St., New York.

PAINTS.
Acme White Lead & Color Wks., Detroit, Mich.
Bass Paint Co., 108 Fulton St., New York.
Clarke & White Co., 106 Fulton St., N. Y.
Darby-McQuade Paint Co., 416 Marcy Ave., Brooklyn, N. Y.
Eagle Paint & Varnish Works, Pittsburgh, Pa.
Samuel H. French & Co., Philadelphia.
Harrison Bros. & Co., Inc., Philadelphia.
John Lucas & Co., Philadelphia.
John W. Masury & Son, New York.
Benj. Moore & Co., Brooklyn, N. Y.
Pittsburgh Plate Glass Co., Pittsburgh, Pa.
J. Lee Smith & Co., 59 Frankfort St., N. Y.
D. T. Tiemann & Co., 44 Duane St., N. Y.
U. S. Smelting Co., Canon City, Colo.
S. P. Wetherell Co., New York and Phila.
C. K. Williams & Co., Easton, Pa.

PARAFFINE OIL.
Manufacturers' Paraffine Co., Chester, Pa.
Standard Oil Co., New York.
Tidewater Oil Co., New York.

PARAFFINE WAX.
Crew Levick Co., Philadelphia.
Manufacturers' Paraffine Co., Chester, Pa.
Smith & Nichols, 145-147 Front St., New York.
Standard Oil Co., 408 W. 14th St., New York.
Tidewater Oil Co., 12 Broadway, New York.

PETROLEUM.
Atlantic Refining Co., Franklin, Pa.
Borne, Scrymser Co., 80 South St., New York.
Crew Levick Co., Philadelphia.
Standard Oil Co., New York.
The Paragon Refining Co., Toledo, O.
Union Petroleum Co., 138 S. Fourth St., Phila.
Waters-Pierce Oil Co., 816 Olive St., St. Louis.

PHOSPHORUS.
General Chem. Co., 608 Bourse, Philadelphia.

PRUSSIATE OF POTASH.
Fuerst Bros. & Co., 2 Stone St., New York.
A. Klipstein & Co., 122 Pearl St., New York.
Kuttroff, Pickhardt & Co., 128 Duane St., N. Y.
The Roessler & Hasslacher Chemical Co., 100 William St., New York.
Louis de Vriendt, Antwerp, Belgium.

PLUMBAGO.
Joseph Dixon Crucible Co., Jersey City, N. J.
Paterson, Boardman & Co., 133 Front St., N. Y.
Wegelin & Wilckes Black Mfg. Co., 50 Cliff St., New York.

PUTTY.
E. S. Belknap, McSherry & Moran, 286 Monroe St., New York.

QUININE.
Merck & Co., New York.
N. Y. Quinine & Chemical Works, 114 William st., New York.
R. W. Phair & Co., 16 Platt St., New York.
Powers & Weightman, Philadelphia.
Roessler & Hasslacher Chem. Co., 100 William St., New York.
Rosengarten & Sons, Philadelphia, Pa.

ROSIN.
A. L. Webb & Sons, Baltimore, Md.

ROTTEN STONE.
Geo. G. Blackwell, Sons & Co., Ltd., The Albany, Liverpool, England.
R. J. Waddell & Co., 52 Beekman St., N. Y.

SAL AMMONIAC.
J. A. & W. Bird & Co., 88 Wall St., N. Y.
Cochrane Chemical Co., 55 Kilby St., Boston.
Grasselli Chemical Co., Cleveland and N. Y.
A. Klipstein & Co., 122 Pearl St., New York.
R. W. Phair & Co., 16 Platt St., New York.
The Roessler & Hasslacher Chemical Co., 100 William St., New York.
Thomsen Chemical Co., Baltimore, Md.
Louis de Vriendt, Antwerp, Belgium.

SAL SODA.
Church & Dwight Co., 63-65 Wall St., N. Y.
Diamond Soda Works, Milwaukee, Wis.
Ferguson Bros., Philadelphia.
Grasselli Chemical Co., Cleveland and N. Y.
Hollingsworth & Peterson, 653 Bourse, Phila.
James Lee & Co., 76 William St., New York.
Penna. Salt Mfg. Co. 115 Chestnut St., Phila.
Welch & Welch, 121 Broad St., New York.
John C. Wiarda & Co., Brooklyn, N. Y.
Wing & Evans, 22 William St., New York.

SALT CAKE.
General Chem. Co., 25 Broad St., New York.
Grasselli Chemical Co., Cleveland and N. Y.

SALTPETER.
Battelle & Renwick, 163 Front St., New York.

SEEDS.
J. Fritzlin, Amsterdam.
Les Fils de F. Balladur, Smyrna (Asia Minor).
Planchon Ainee, Marseilles, France.
Roger Schultz & Co., Trieste, Austria.

SHELLAC.
Berry Brothers, Ltd., Detroit, Mich.
Hoople & Androvette, 218 Fulton St., N. Y.
New York Shellac So., 229 Pearl St., N. Y.
Rogers & Pyatt, 78 Maiden Lane, New York.

SODA ASH.
Arnold, Hoffman & Co., Providence.
Edw. Hill's Son & Co., 25 Cedar St., N. Y.
A. Klipstein & Co., 122 Pearl St., New York.
James Lee & Co., 76 William St., New York.
Welch & Welch, 121 Broad St., New York.
Wing & Evans, 22 William St., New York.
Isaac Winkler & Bro., Cincinnati, O.

SOLUBLE COTTON.
Billings, Clapp Co., Boston, Mass.
Chas. Cooper & Co., 194 Worth St., New York.
Geo. A. Erkenbrach, 115 Maiden Lane, N. Y.
Maas & Waldstein, 107 Murray St., New York.

STRONTIA NITRATE.
R. W. Phair & Co., 16 Platt St., New York.
Rogers & Pyatt, 78 Maiden Lane, New York.

STONEWARE.
F. Behrend, 54 Front St., New York.
The Roessler & Hasslacher Chemical Co., 100 William St., New York.
Arthur J. Weeks, Akron, O.

STRYCHNINE.
Merck & Co., New York.
N. Y. Quinine & Chemical Works, New York.
Powers & Weightman, Philadelphia.

SUGAR OF MILK.
Merck & Co., New York.
Schoellkopf, Hartford & Hanna Co., Buffalo, and New York.

SULPHATE OF AMMONIA.
Cochrane Chemical Co., 55 Kilby St., Boston.
Ferguson Bros., Philadelphia.
Lister's Agri. Chem. Works, 26 B'way, N. Y.

SULPHATE OF SODA.
Cochrane Chem. Co., 55 Kilby St., Boston.
General Chemical Co., 25 Broad St., New York.
Merrimac Chem. Co., 75-77 Broad St., Boston.

SULPHUR AND BRIMSTONE.
Battelle & Renwick, 163 Front St., New York.
General Chemical Co., 25 Broad St., New York.
T. & S. C. White Co., 22 Burling Slip, N. Y.

TALC.
The Atlas Co., Lincoln, N. J.
Geo. G. Blackwell, Sons & Co., Ltd., The Albany, Liverpool, Eng.
Clarke & White Co., 106 Fulton St., N. Y.
C. K. Williams & Co., Easton, Pa.

TALLOW.
Welch & Welch, 121 Broad St., New York.

TARTARIC ACID.
Chas. Pfizer & Co., New York.
Powers & Weightman, Philadelphia.
Tartar Chemical Co., 47 Cedar St., New York.

TIN CANS.
American Can Co., 11 Broadway, New York.

TURPENTINE.
Standard Oil Co., New York.
A. L. Webb & Sons, Baltimore, Md.

VANILLA BEANS.
Dodge & Olcott, 86 William St., New York.
Thurston & Braidich, 128 William St., N. Y.

VANILLIN.
C. Bischoff & Co., 88 Park place, New York.
Fries Bros., 92 Reade St., New York.
A. Klipstein & Co., 122 Pearl St., New York.
Magnus & Lauer, 92 Pearl St., New York.

VARNISH.
Acme White Lead & Color Wks, Detroit, Mich.
Berry Brothers, Ltd., Detroit, Mich.
Harrison Bros. & Co., Inc., Philadelphia.
John W. Masury & Son, New York.

VARNISH—Continued.
Pittsburgh Plate Glass Co., Pittsburgh, Pa.
Pratt & Lambert, Long Island City, N. Y.
Reinhart Chemical Co., 84 Bartlett St., Brooklyn, N. Y.
Thresher Varnish Co., Dayton, O.

VARNISH GUMS.
Edw. Hill's Sons & Co., 27 Cedar St., N. Y.
Paterson, Boardman & Co., 133 Front St., New York.
Rogers & Pyatt, 80 Maiden Lane, New York.
S. Winterbourne & Co., 94 Pine St., New York.
Louis de Vriendt, Antwerp, Belgium.

WHITE LEAD.
Atlantic White Lead and Linseed Oil Co., 100 William St., New York.
Darby-McQuade Paint Co., 416 Marcy Ave., Brooklyn.
Davis Lead Co., Pittsburgh, Pa.
Samuel H. French & Co., Philadelphia.
Harrison Bros. & Co., Inc., Philadelphia.
National Lead Co., 100 William St., New York.
Wm. J. Matheson & Co., Ltd., 182 Front St., New York.
J. Lee Smith & Co., 59 Frankfort St., N. Y.
Union Lead & Oil Co., 32 Liberty St., N. Y.

WAX.
W. H. Bowdlear & Co., Boston.
Smith & Nichols, 145 Front St., New York.

WINDOW GLASS.
American Window Glass Co., Pittsburgh, Pa.
Pittsburgh Plate Glass Co., Pittsburgh, Pa.

WOOD ALCOHOL.
Chas. Cooper & Co., 194 Worth St., New York.
Hoople & Androvette, 218 Fulton St., N. Y.
Manhattan Spirit Co., Buffalo, N. Y.
Merrimac Chem Co., 75-77 Broad St., Boston.
A. L. Webb & Sons, Baltimore.

ZINC.
The New Jersey Zinc Co., 11 B'way, N. Y.

MACHINERY MANUFACTURERS.

AUTOMATIC PRESSES.
American Process Co., 62 William St., N. Y.

BOLTING CLOTH.
P. F. Campbell, 55 Laurel St., Philadelphia.
Charles Mill Supply Co., 15 S. William St., N. Y.
Chas. Kaestner & Co., 241 S. Jeff'n St., Chicago.

BOLTING MACHINERY.
C. O. Bartlett & Snow Co., Cleveland, O.
P. F. Campbell, 55 Laurel St., Philadelphia.
Faust Machine Works, Brooklyn, N. Y.
Chas. Kaestner & Co., 241 S. Jeff'n St., Chicago

BURR STONES.
J. R. Alsing Co., 75 Guernsey St., Brooklyn.
C. O. Bartlett & Snow Co., Cleveland, O.
P. F. Campbell, 55 Laurel Ct., Philadelphia.
Charles Mill Supply Co., 15 S. William St., N.Y.
Bruyn Hasbrouck, New Paltz, N. Y.
Chas. Kaestner & Co., 241 S. Jeff'n St., Chicago.

CALDRONS.
Chas. Kaestner & Co., 241 S. Jeff'n St., Chicago.
D. R. Sperry & Co., Batavia, Ill.

CEMENT MACHINERY.
J. R. Alsing Co., 75 Guernsey St., Brooklyn.
C. O. Bartlett & Snow Co., Cleveland, O.
P. F. Campbell, 55 Laurel St., Philadelphia.
Charles Mill Supply Co., 15 S. William St., N.Y.
Chas. Kaestner & Co., 241 S. Jeff'n St., Chicago

CENTRIFUGAL MILLS.
Am. Tool & Machine Co., 109 Beach St., Boston.
P. F. Campbell, 55 Laurel St., Philadelphia.

COOKERS.
American Process Co., 62 William St., N. Y.

DIGESTERS.
American Process Co., 62 William St., N. Y.

DISINTEGRATORS.
J. R. Alsing Co., 75 Guernsey St., Brooklyn.
P. F. Campbell, 55 Laurel St., Philadelphia.
The J. H. Day Co., Cincinnati, O.
Kent Machine Wks., 246 Plymouth St., B'klyn.
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Charles Mill Supply Co., 15 S. William St., N.Y.
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Faust Machine Works, Brooklyn, N. Y.
Chas. Kaestner & Co., 241 S. Jeff'n St., Chicago.
Raymond Bros., Impact Pulverizer Co., 1402 Monadnock Block, Chicago, Ill.
Chas. Ross & Son Co., 18 Steuben St., B'klyn.

DRYING MACHINES.
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American Vacuum Drying Machine Co., 120 Liberty St., New York.
C. O. Bartlett & Snow Co., Cleveland, O.
Joslin Schmidt & Co., Cincinnati, O.

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T. Shriver & Co., 341 E. 56th St., New York.

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WANT COLUMN (page 22).

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NEW YORK, NOVEMBER 10, 1902.

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NITRATE OF SODA HIGHER.

The market for nitrate of soda has steadily gained in strength and since the opening of the present month prices have advanced steadily, with the indications pointing strongly to still higher prices in the near future. The situation is exceptionally strong, both here and at the primary market. The demand having increased at a rapid rate, both from this country and from Europe, has encouraged producers on the West Coast to raise their quotations and as the output has been smaller than the allotments provided for, some of the oficinas have practically nothing to offer. The freight rates, also, are high and altogether the outlook is not favorable to the consumer. The situation here is also strong, the demand having increased of late to such an extent that there is very little available for early delivery. The resumption of mining operations has caused sudden and exceptionally large requirements, the manufacturers of powder becoming liberal purchasers, although they had accumulated large supplies during the time of the coal strike. This has absorbed the nearby offerings and engagements for future arrivals have also been heavy. The visible supply to February 15 is about 500,000 bags which would, under ordinary conditions, fully meet current requirements, as the average consumption is about 110,000 bags per month. Under the present exceptionally heavy demand, however, this amount may not prove sufficient to supply the requirements and temporary scarcity may result, especially if some of the vessels on the way are detained by stress of weather or other causes. It will be noticed by reference to the list of vessels on the way printed on another page of this issue that a larger proportion than usual of the vessels carrying nitrate of soda to the United States are sailing vessels and the length of time they may be on the way is uncertain, and a voyage extending considerably beyond the average in length would, under present conditions, cause temporary scarcity.

THE AMSTERDAM CINCHONA BARK SALE.

The ninth cinchona bark auction was held at Amsterdam on Thursday last, and went off at a decline, the average unit price being a fraction over six Dutch cents, comparing with the average unit prices of the last and former sales, as shown in the following table:—

	Dutch Cents. 1902.	Dutch Cents. 1901.	Dutch Cents. 1900.	Dutch Cents. 1899.
First	7.50	7.25	8.90	4.70
Second	8.00	7.50	10.65	6.70
Third	8.60	9.00	10.05	10.90
Fourth	8.65	10.00	10.10	8.50
Fifth	7.25	10.50	10.35	8.25
Sixth	6.10	9.00	10.80	7.60
Seventh	5.00	7.60	11.75	6.25
Eighth	6.80	8.25	12.25	6.35
Ninth	6.05	7.75	10.90	6.80
Tenth	....	7.75	8.00	7.75

It will be remembered that the offerings for the auction were very large, aggregating 10,449 packages, but of this quantity only about seventy-five per cent. was sold, the remainder, according to cablegrams, being withdrawn, but even under these conditions the sale was one of the largest of the year.

In some quarters a greater decline was looked for, owing to the statistical position of bark; and, because the sale did not go off at any lower figures, it was taken as an encouraging indication and quite a little inquiry developed, which in some cases culminated in quite a little business. The outside market sagged in spite of the optimistic views of some dealers, the general opinion being that the decline in bark values presaged a reduction of about two cents in manufacturers' quotations. At the close, however, it looks doubtful if any decline takes place at once.

THE STATISTICAL POSITION OF GAMBIER.

There seems to be no abatement of the firmness which has been a characteristic of the market for gambier during a number of months past. The statistical position of the article continues very strong, an active demand keeping goods moving well in spite of the comparatively heavy arrivals of late. Since our last editorial on this subject, the steamers Braemar, Spithead, Bencleuch and Verona, and the sailing vessel E. A. O'Brien have arrived, and discharged cargoes aggregating about 11,495 bales, and the sailing vessel Penobscot is in at Boston with 2,080 bales. In addition to these amounts the steamers Asama, Atholl and Seneca are in port and discharging combined cargoes of 18,960 bales. As stated above, all of the goods arriving have been rapidly moved. The present store stocks amount to about 4,200 bales in New York and 100 bales in Boston. The goods afloat for and at New York and Boston are as follows:—

AFLOAT FOR AND AT NEW YORK.

	Bales.
Steamer Asama, in port	6,149
Steamer Atholl, in port	9,532
Steamer Seneca, in port	3,096
Steamer Satsuma, due about Nov. 15	1,750
Steamer Heathburn, due about Nov. 20	14,000
Steamer Richmond Castle, due about Nov. 25	2,000
Steamer due about Dec. 10	2,500
	39,027

AFLOAT FOR BOSTON.

Sailer Belmont, due about Jan. 20	3,000
Total	42,027

The figures shown in the foregoing table, together with the stocks in store would make the visible supply to the first of February about 46,327 bales, against a visible supply of about 29,000 bales to the same period of the present year. The deliveries to consumers during October, aggregated nearly 15,000 bales against 7,536 bales in September, making a total of 105,724 bales since January 1, against 110,000 bales during the first ten months of 1901.

From January 1 to October 31 of this year, the shipments of gambier from Singapore were as follows:—

	1902. Bales.	1901. Bales.	1900. Bales.
To the United States	132,500	104,100	117,800
To Great Britain	88,750	117,000	112,600
To the Continent	47,300	87,100	81,000
Total	270,550	278,200	310,900

THE NOVEMBER COCOA BUTTER AUCTIONS.

In spite of recent advices from abroad, reporting a better feeling in markets for cocoa butter, the auctions at Amsterdam and London last Tuesday went off at declines. At Amsterdam the average price was one florin below the average of the October sale and at London the decline amounted to one-eighth penny. The following table gives the range of prices:—

	Amsterdam. Dutch cts. per ½ kilo. 1901.	1902.	London. Pence per lb. 1901.	1902.
January	88	71	17¼	12⅝
February	85½	60	17⅛	12⅜
March	75⅝	64	15⅜	12¼
April	71¾	67	15⅜	12¼
May	77	68	14½	12⅛
June	85	67	17⅛	12¼
July	87	74	17	12¼
August	83	75	16½	14
September	84	68	16¾	12⅜
October	78	66	14	12¼
November	74	65	12⅝	12⅜
December	69	..	12⅝	..

At Amsterdam the amount of cocoa butter offered for sale was larger than at any sale since January of last year and consisted of seventy tons of Van Houten's, thirteen tons of De Jong, two and one-half tons of Helm, nine and one-half tons of Mignon, six tons of Mignon, second hands, twenty tons of Mercumstaaf and twelve and one-half tons of a foreign brand. At London seventy tons of Cadbury's brand were offered. These offerings compare with those of previous sales as shown below:—

	Amsterdam. Tons. 1901.	1902.	London. Tons. 1901.	1902.
January	90	119	75	70
February	101	110	120	90
March	143	107	60	90
April	110	96	100	100
May	90	106	55	100
June	65	96	35	70
July	60	83	35	50
August	45	59½	35	20
September	60	94½	25	60
October	80	131½	50	85
November	104	133½	100	70
December	103	..	80	..

There has been no quotable change in prices for cocoa butter in this market, the sale having apparently been without influence, but present quotations are nominal and the market is easy owing to the dull condition of trade.

DEMORALIZED WINDOW GLASS TRADE.

The expectation indulged in, when the Independent Glass Co. was reorganized, that the effects of the prolonged conflict between manufacturing interests would soon disappear, and natural conditions assert themselves, has not been realized. In fact, in some respects conditions are quite as bad as they were at any time during the past year. The demoralization, however, now sems to be confined to the jobbing branch. Between the three manufacturing combines, the American, Federation and new Independent concerns, there seems to exist an understanding, tacit at least, that the present prices are to be maintained during this fire. Such an intimation was conveyed by representatives of the manufacturers at a recent meeting of the Western division of the National Window Glass Jobbers' Association and serves as a basis for action which it is hoped will put a stop to price cutting.

Two causes have existed to produce the demoralized conditions in the distributing trade. Some jobbers who were not members of the National Association, having contracts with the old independent company at low prices, have been in a position to profitably undersell others not so situated and this led to general cutting of prices in those districts in which the cheap glass was marketed. The other cause was less tangible, but equally effective in unsettling the market. For some reason which does not appear a widespread belief prevails, or did prevail, that prices to be named by the manufacturers, on their making of a new contract with the jobbers, would be lower than those paid for the last allotments. They have, however, received distinct assurance that such a belief is entirely unwarranted, and at the meeting above referred to they were informed by representatives of the American and Federation companies that the price on glass sold this fire would not be less than 88 per cent. discount from the list. It was also stated then that there was reason to believe that the Independent Company, as reorganized, would cooperate with the affiliated concerns as to prices, time of ending the fire, etc., and in all respects the three organizations, representing more relative pot capacity than ever before, would work for the common good.

To the assurance of the manufacturers has been added that of the president of the Jobbers' Association, who in a recent circular sent to the members of that organization urging the withdrawal of low quotations stated that there will absolutely be no chance to purchase glass from manufacturers during the current fire at less than the prices of the Detroit contract. He added that, owing to the very small margin between present cost and selling price, it is probable that more money will have to be paid by the jobbers on their next purchase.

There is now a general desire on the part of the jobbers to act on this information, particularly as the active consuming season is now at its height, and to that end a meeting of the National Window Glass Jobbers' Association with the leading manufacturers will be held in Pittsburg on Monday, to talk over the situation and devise means for putting the market on a sound basis.

THE PETROLEUM FIELDS IN OCTOBER.

Notwithstanding the advance in the price of the product, which was believed would stimulate development operations in the older producing regions, the summary of operations for the month of October shows a decrease. The results attending the search for oil also showed some improvement, fewer dry holes being reported and the average production of the October wells was about the same as that of the September wells. It is due, probably, to the very large preponderance of small wells which, although more or less profitable at the present price of the product, do not present alluring prospects. The decrease in the number of completed wells came somewhat as a surprise, the daily reports having given no indication that such would prove to be the case, though a large increase in completed wells and of new work under way was not expected. The new production also shows a decrease, but only of an amount representing the production of the decreased number of wells at about the average production, and is therefore not significant or in itself important. It is apparent from the results of operations during the past two months that there is little prospect of being able to keep up the production of the higher grades of oil, and naturally producers are looking with confidence for still higher prices. The amount of new work under way at the close of the month shows a small decrease and this is the more significant as it is in the number of rigs in course of erection, the number of wells drilling at the end of October being the same as at the end of September. It is probable, therefore, that the number of wells which will be completed during the current month will show no increase, and as weather conditions are likely to be less favorable during the ensuing months a decrease in production will not prove surprising. Results of drilling operations, however, are uncertain, and should a new pool of considerable extent be discovered it might result in increased total production, notwithstanding there was a decrease in the number of wells completed.

The total number of wells completed during the month of October in the northern fields was 1,406, showing a decrease of forty-seven as compared with the number completed during September. The daily production of these wells at the close of the month was 19,263 barrels, showing a decrease of 770 barrels. The average daily production of the October wells was thirteen and seven-tenths barrels, while that of

the September wells was thirteen and three-quarters barrels. Of the wells completed, 271 proved dry, showing a decrease of fourteen, and lowered the percentage of failures somewhat. The number of wells drilling at the close of October was 1,282, the same number as at the close of September. The number of rigs in course of construction was 626, which shows the total decrease of new work under way to be eighteen wells.

TRADE ITEMS.

(For other Trade Items see table of contents on page 22.)

Willis H. Lowe, of the Willis H. Lowe Co., Boston, was in the city last week scattering his perfumes.

W. Cooper Proctor, of the Proctor & Gamble Company of Cincinnati, O., was in the city during the week.

The plant of the Ray Chemical Company, at Detroit, Mich., was destroyed by fire Oct. 31. The loss is estimated at $75.000, covered by insurance.

The Dominion Licorice and Novelty Company, of Toronto, Canada, has been absorbed by the National Licorice Company of New York. It was the only industry of the kind in Canada.

W. R. Cantrell, secretary of the Williams & Flash Company of this city, returned home on Monday last from a trip among the cotton oil mills in the Atlantic section.

Reports were current in Baltimore last week to the effect that a consolidation was to be effected between the wholesale drug houses of James Baily & Son and Gilpin, Langdon & Co.

Geo. G. Blackwell, of Geo. B. Blackwell, Sons & Co., Liverpool, has reached the States in his travels over this continent, and this week expects to be in Pittsburgh, where his address will be Hotel Schenley.

An order-in-council has been passed at Ottawa, Canada, placing refined cottonseed oil, for canning fish, upon the free list. This is a product which is extensively used as a substitute for olive oil in tinning sardines.

W. J. Gesell, of Lehn & Fink, who underwent an operation for appendicitis about four weeks ago, is progressing very favorably and, with Mrs. Gesell, has gone to Atlantic City to fully recover his strength. He expects to be at his desk within the next ten days.

The exports of phosphate rock from the port of Savannah, Ga., during the month of October, reached a total of 27,704 tons, 11,096 tons going to Bremen, 6,252 tons to Rotterdam, 3,200 tons to Stettin, 2,513 tons to Zwijndrecht 2,089 tons to Hamburg, 1,045 tons to Trieste, 1,006 tons to Venice, and 503 tons to Genoa.

The Union Petroleum Co., of Canada, have filed a petition in court for the winding up of the Zanzibar Paint Co., incorporated last January. The factory is in Toronto, but, according to the petition, the company has ceased to do business. The liabilities are placed at $4,600. The petitioners are creditors to the extent of $400.

James J. Fitzpatrick, president of the Fitzpatrick Glass Manufacturing Co., and Thomas P. Welsh, secretary and general manager of the same concern, have bought the J. Mahler glass plant at Du Bois, Mich., and taken charge. Last year the Mahler plant, which was erected six years ago, was greatly improved and enlarged.

Three New Bedford vessels and one San Francisco vessel obtained excellent catches of sperm oil during their cruise in the Japan Sea the past season, as follows:—Bark Alice Knowles, 1,540 bbls.; bark California, 1,500 bbls.; bark Chas. W. Morgan, 1,450 bbls.; bark Gay Head, 1,400 bbls.; total, 5,890 bbls. This is the largest quantity ever landed at San Francisco at about the same time. It is thought that most if not all of this quantity will find a ready sale in San Francisco.

The whaling steamers Alexander and Jeanette, which arrived at San Francico on the 1st and 2d instant from the Arctic, report the season's total catch of bowheads to be 58; of these 12 were taken in the outside whaling, the yield of whalebone from which was sent down and disposed of. The yield of the 46 additional bowheads is estimated at 75,000 to 80,000 lbs., which must supply the demand during the next ten months, as the market prior to recent arrivals was entirely bare of stock.

The United States Drug Co. has been incorporated under the laws of the State of New Jersey with a captial of $500,000, the object being to secure or establish a chain of stores throughout the United States.

The daily papers in this section and in the West have printed numerous reports relating to various consolidations among the lead and zinc interests, including the New Jersey Zinc Company. We are authorized by this company to say that these reports as far as they relate to the New Jersey Zinc Company are false and without a shadow of foundation.

The manufacture of bisulphide of carbon is now made in an electric furnace at the works of Edward R. Taylor at Penn Yan, N. Y., and the results are not only satisfactory as to economy of production, but the article is free from impurities and is clear and colorless. Increasing quantities are being used for solvent purposes and for the destruction of vermin, field mice, rats, moles, etc.

Mrs. Frances M. Humphreys, widow of the late Dr. Frederick Humphreys, of the Humphreys Homeopathic Medicine Co., died at her late residence in this city on October 24, aged 76 years. She was noted for her deeds of charity, being the founder of the Helen Frances Humphreys' Home, Copake, New York. Two sons, Dr. Frederick H., of this city, and Dr. F. Landon Humphreys, of Morristown, N. J., survive her.

The annual report of the Electrolytic Alkali Co. shows a profit for the year ended August 31, of £6,420, which, with £1,241 brought forward, makes a disposable balance of £7,662. It is proposed to pay 7 per cent. per annum on the preference shares issued to date, this representing over 14 per cent. on old cumulative preferences which have hitherto received no dividend, and rank from November, 1899. £1,241 is carried forward.

"Recipes for the Color, Paint, Varnish Oil, Soap and Drysaltery Trades" is the title of a book published by D. Van Nostrand Company, this city. Its title fully sets forth the contents, which is a compilation of recipes, most of which have been printed in technical journals. It will be found conveinient for reference and in the hands of competent men will prove valuable, though many of the recipes are not to be recommended, especially those showing the composition of substitutes. The price of the book is $3.50 per copy.

From the leaves of Verbena triphylla L., E. Theulier has obtained by distillation 0.072 per cent. of essential oil of specific gravity of 0.919, rotary power—16 deg. 20 min. The oil, which is soluble in an equal volume of 90 per cent. alcohol, but insoluble in 80 per cent. spirit, has an odor resembling lemongrass, but not like citronella, as has been stated. The principal constituents are laevo-limonene, geraniol, a sesquiterpene, and a stearoptene, which melts at 62.58 C. The percentage of esters calculated as linalyl acetate was 11.2, and of aldehyde 20.8.

The directors of the American Cotton Oil Company last week declared a dividend of 6 per cent. on its common stock, payable in two instalments as follows:—Four per cent. on December 1, 1902, and 2 per cent. on June 1, 1903. This is believed to mean that a policy of semi-annual dividends on the common stock will hereafter be followed. The dividend just declared on the common stock is an increase of 4 per cent. over the rate paid a year ago. The company also declared the usual semi-annual dividend of 3 per cent. on its preferred stock, payable December 1. It is officially announced that the net earnings of the company for the year ended August 31 were sufficient to provide for the dividends declared, leaving a balance of $412,000 to be carried to surplus account.

Health Commissioner Ohage, of St. Paul, Minn., has issued orders that all requests for permits for free distributive purposes shall be refused. This applies to pills, so-called medicinal teas, wafers, and, in fact, anything containing drugs. Patent foods are exempt from this prohibition. Under the terms of the ordinance, anyone desiring to distribute samples of medicine, or prepared foods of any description, must first submit the same for examination, but as far as medicinal samples are concerned the broad view has been taken that they are all dangerous and permits in every instance have been refused. Pills are the most common article of medicine submitted. They are sugar coated, and prove an alluring bait for children and unsuspecting persons, who, unacquainted with their properties, often eat them, with painful and, in some instances, fatal results.

Another attempt of the Louisville Retail Druggists' Association to put through a price agreement has failed, because three of the one hundred and thirty-five druggists of the city refused to sign. The agreement formulated by the druggists contemplated what was practically a ten per cent. advance on the present prices of patents, which, in some cases, are below the cost price of the goods.

The jury in the case of Hamilton M. Dawes against Hegeman & Co., a corporation, awarded the plaintiff $3,281.08 damages. The suit was for $5,073.41. The plaintiff claimed damages resulting from injuries alleged to have been caused by a remedy called Dr. Goldsmith's Quick Headache Cure, recommended and sold to him by the defendant corporation. He claimed to have taken three tablets in accordance with directions on the bottle and after taking the third he became violently ill and has suffered ever since from the effects of the dose. The remedy is manufactured by several pharmaceutical houses and is largely sold. George Ramsey, vice-president and general manager of Hegeman & Co., the defendant corporation, stated that the case would be appealed. It seems to be the general impression in the drug trade that the verdict will be set aside by the higher court.

At the sixth annual general meeting of the Anglo-Sicilian Sulphur Co. held recently in London, Mr. W. T. Brand, who presided, said that the sales were not so large as in the previous year, the exports to France, Italy, and Germany and other vine-growing countries having fallen off for various reasons. In the opinion of the Board the stocks held in Sicily on July 31 last practically represented the total visible supplies of the world, and they might look forward to increased exports early next year to Italy and France. The gross profits for the period under review amounted to £127,064, against £145,670 in 1901, owing to smaller sales, although the prices obtained were rather higher. The net profits, amounting to £89,278, showed a decline of £17,635. The usual dividend of 6 per cent. was passed on the preference shares, with a further small distribution per share on these shares amounting, as in past years, to a fraction of a penny per share, and of 6d. per share on the ordinary shares, as in the past three years. The total reserves in securities and invested in the business aggregated £243,637.

(For other Trade Items see table of contents on page 22.)

PETROLEUM NOTES.

The total shipment of oil by rail from Beaumont last month was 6,522 cars, or 1,114,065 barrels.

In the Burning Springs district, Wirt county, W. Va., Stuart & Young's No. 9 on the F. F. Bailey farm has a show for a small pumper.

In the Chester Hill district, Morgan county, O., J. A. Henne has completed No. 8, on the Martha Scott farm, and has a 5-barrel pumper.

In the Legionville district, Beaver county, Pa., the South Penn Oil Co.'s No. 18 on the Rock heirs' farm is good for 15 or 20 barrels a day.

In the Joy district, Morgan county, O., the Midland Oil Co. has completed No. 169, on the E. R. Dale tract, and has a show for a light well.

On Island creek, Jefferson county, O., W. C. Kennedy & Co. have completed No. 3 on the Wm. Winters farm and have an 8 or 10-barrel pumper.

In the Coraopolis district, Alleghany county, Pa., the Enlow Oil Co. has completed a test on the Enlow Oil Co.'s farm and has a small pumper.

In the Corning district, Perry county, O., Snyder & Coldren have completed a test on the William Chadwick farm and have a very small pumper.

On Dutchman run, Murphy district, Ritchie county, W. Va., the Southern Oil Co.'s test on the Alvin Wince farm has a show for a 10-barrel pumper.

North of Smiths Ferry, Beaver county, Pa., Galey Bros. have completed No. 5 on the W. W. Dawson farm, and have a 10-barrel pumper.

In the Turkeyfoot extension, Beaver county, Pa., the Belmont Oil & Gas Co. has completed its No. 4 on the W. H. Bell farm, and has a 5-barrel pumper.

In the extreme northeast end of the Pine Grove district, Wetzel county, W. Va., E. H. Jennings & Bros. have drilled in a test on the Strosnider farm and have a producer flowing at the rate of 7 barrels an hour from the Gordon.

North of Smiths Ferry, Beaver county, Pa., Galey Bros. have drilled in No. 6, on the W. W. Davison farm, and have a show for a 50-barrel producer.

In the Jackson Ridge district, Monroe county, O., Bream & Parker have drilled No. 3 on the E. C. Haney farm through the Keener and have a small pumper.

In the Big Knot run pool in Ritchie county, W. Va., the Three Joes Oil Co. has completed its No. 8 on the Elroy Wagner farm, and has a 50-barrel producer.

On Wolf creek, Morgan county, O., A. J. Lockard & Co. have completed No. 7 on the G. E. Morris farm, and have a show for a 25-barrel producer in the shallow sand.

In the lower Homeworth district, Columbiana county, O., Johnson, Upham & Ralston have completed No. 4 on the Perrine heirs' farm, and have a very light pumper.

The Kanawha Oil Co. has drilled in its No. 99, on the John Mills tract, Buffalo creek, Wetzel county, W. Va., and the well produced 200 barrels the first 24 hours.

In the Chester Hill district, Morgan county, O., H. H. Burns has completed his No. 30 on the H. A. Van Law farm, and has a 10-barrel pumper in the first Cow run sand.

In the Pine Grove district, Wetzel county, W. Va., the South Penn Oil Co. has completed No. 2, on the Martin Dulaney farm, and has a 15-barrel producer, natural.

South of Littleton, Wetzel county, W. Va., Brost & Newman have drilled their No. 2 on the Pettit farm into the fourth sand and have a show for a 25-barrel producer.

In the Wilking district, Washington county, O., the Portage Oil Co. has completed its No. 4, on the William Preiss farm, and has a show for a 20-barrel producer.

In the Fish Creek district, Marshall county, W. Va., the South Penn Oil Co. has completed and shot No. 8 on the Nathan Shepherd farm, and has a show for a fair producer.

In the Warner district, Washington county, O., the Muskingum Oil & Gas Co. has drilled its No. 3 on the Daniel Schank farm through the sand and has a 5-barrel pumper.

In the old McCurdy district, Allegheny county, Pa., John M. Patterson has completed a test well on the Miller heirs' farm and has a natural producer, good for 20 barrels a day.

In the Bristoria field in Greene county the South Penn Oil Co. has drilled its test on the J. T. Elbin farm 19 feet into the sand, and the hole has filled up 700 feet with fluid.

On Wolf creek, Morgan county, O., A. A. Cameron has drilled his No. 3, on the J. B. Breckenridge farm, into the top of the first Cow run sand, and has a show for a good producer.

In the Little Germany district, Marshall county, W. Va., the Venture Oil Co. has drilled in its test on the John Bricker farm and has a show for a 70-barrel producer in the Gordon sand.

On the Wolf Pen run, Ritchie county, W. Va., the Cleveland & Parkersburg Oil Co. has drilled in its No. 7 on the Thomas E. Dye farm and has a natural producer good for 200 barrels a day.

On the big Robertson tract, in Wetzel county, W. Va., in the Folsom district, the South Penn Oil Co. has drilled its No. 7 deeper into the Gordon and increased its production to 25 barrels an hour.

In the Gordon sand development, on Grass run, Harrison county, W. Va., the Southern Oil Co. has drilled its No. 5 on the Alexander Riley farm and the well produced 430 barrels the first nine hours.

In the "Little Germany" district, Marshall county, W. Va., the South Penn Oil Co. has completed its No. 5 on the John Nolte farm, and has a show for a 100-barrel producer in the Gordon.

In the northeast end of the Big Knot run district, Ritchie county, W. Va., the Three Joes Oil Co. has completed No. 8, on the Elroy Wagner farm, and will not have better than a 40-barrel pumper unless a shot helps.

In the Keener sand development on Wolf Pen run, Ritchie county, W. V., the Cleveland & Parkersburg Oil Co. has completed and shot its No. 6 on the Thos. E. Dye farm and has a 100-barrel producer. In the extreme southwest end of the development, the Associated Producers' Co. has completed and shot its No. 5 on the Wm. Clark farm and has a producer good for 125 barrels a day.

In the Clear Fork district, Monroe county, O., McFadden, Turtchell & Co. have completed and shot their test on the Peter Smithberger farm and have a show for a 50-barrel producer in the Big Lime.

Southeast of Rinards Mills, in Washington county, O., the Carter Oil Co. has completed and shot its second test on the Dickson Bros.' farm, in the Berea grit, and has a show for a very light well.

In the Burning Springs district, Wirt county, W. Va., G. H. and M. Mealey have completed a test on the William Gibson farm, in the second Cow run sand, at a depth of 440 feet, and have a 5-barrel pumper.

In the Pine Grove district, Wetzel county, W. Va., the South Penn Oil Co. has drilled in a test on the Marion and W. T. Jackson farms, and No. 3 on the Samuel Long farm. All are showing for light wells.

In the Salem district, Harrison county, W. Va., the Southern Oil Co.'s No. 5, on the Alex Riley farm, produced close to 700 barrels the first 24 hours. In the same district the Federal Oil Co. has completed No. 6, on the Ed. Conley farm, and has a 10-barrel pumper in the Gordon.

On Plum creek, Harrison county, O., the Ohio Southern Oil Co. has completed Nos. 6 and 7 on the W. D. Copeland farm and has a brace of 10-barrel pumpers. In the same district R. G. Gillespie has completed his No. 3 on the John Jones farm and has a 5-barrel pumper.

North of Marietta, O., in the Shallow sand territory, the Federal Oil Co. has completed No. 2 on the A. A. Middleswart farm and has a 25-barrel producer. In the same district the Lilly Oil Co. has drilled in No. 6 on the George Ammon farm and has a 70-barrel producer.

On a line between the Crows Run development in Beaver county, Pa., and the development southwest of Zelienople, Butler county, and located in the first named, Snyder & Sons have drilled in a 100-foot producer on the James Reader farm, reported to be good for 75 barrels a day from the top of the sand.

North of Marietta, Washington county, O., Charles S. Cameron has shot his No. 1 on the W. A. Harper farm and increased its production to 300 barrels a day in the shallow sand. In the same district Hannan & Co. have completed No. 14 on the Holmes heirs' farm, and have a show for a 25-barrel producer in the same formation.

In the Elm Run district, Ritchie county, W. Va., the Buck Oil Co. has completed its No. 6, on the E. Buck farm, and has a show for a 10-barrel pumper in the salt sand. In the same district the New York Petroleum Co. has drilled in its No. 6, on the L. Moss farm, and has a show for a 15-barrel pumper in the salt sand.

In the Chester Hill district, Morgan county, O., Smith, Talbott & Co., have completed No. 16 on the Isaac Armstrong farm and have a 10-barrel pumper. W. C. Patterson & Co.'s No. 11 on the J. S. Parker farm is good for 5 barrels a day, and the Cumberland Oil Co.'s No. 35 on the Ed. Hopkins farm is the same kind of a pumper.

In the Bristoria district, Greene county, O., the South Penn Oil Co. has completed its test on the J. L. Elbin farm, and will not have better than a 5-barrel pumper. In the Fish creek district, Marshall county, the same company has drilled its No. 2, on the R. A. Chambers farm, through the Gordon, and has a producer good for 100 barrels a day.

The Galveston Oil & Stock Exchange last week elected the following officers and directors for the ensuing year: Directors, James S. Waters, E. L. Dorch, D. B. Henderson, J. E. Moore, John Adriance, J. L. Beveridge and E. A. Toebelman. Officers, James S. Waters, president; John Adriance, vice-president; D. B. Henderson, treasurer; F. A. Farda, secretary.

In the "Little Germany" district, in Marshall county, W. Va., the South Penn Oil Co. has drilled its No. 3 on the Daniel Mason farm five feet into the Gordon and the well produced 60 barrels the first 24 hours. In the territory to the east side of the development, the Venture Oil Co. drilled its test on the John Theil farm deeper into the Big Injun sand, and the first 15 hours after they began to drill the well produced 125 barrels. In the same district the Eclipse Oil Company has drilled its test on the John Bickar farm through the Gordon and it is showing for a 60 or 70-barrel producer.

On Rich Fork, the lower end of the Lewisville district, in Monroe county, O., the Pure Oil Co. and F. P. Hue have drilled their No. 5 on the Daniel Baker farm into the Keener sand, and have a show for a 50-barrel producer.

Northeast of Rinards Mills, on Clear Fork creek, Monroe county, O., Smith & Kochert have drilled their No. 4, on the Martin Bros.' farm, into the Big Lime, and have a show for a natural producer, good for 40 barrels a day. Walton & Co. have drilled a test on the Thomas Parks 10 acres, through the Keener sand, and since shot the well is producing 60 barrels a day.

CORRESPONDENCE.

The Oil, Paint and Drug Reporter assumes no responsibility for statements contained in communications printed under this heading, nor does it by such publication indorse any opinions which a correspondent may express. The Reporter deprecates the use of fictitious names by correspondents, and is of opinion that a communication which the author is unwilling to acknowledge would better remain unwritten.

The Liverpool Cottonseed Meal Contract.

Liverpool, Oct. 25, 1902.

Editor Oil, Paint and Drug Reporter:

In this country a correspondent, who in addition to a full column of reply to his statement of case finds himself confronted with another column of leading article, is apt to regard himself as somebody of importance. But situated as I am with an ocean between me and my critics, it will be evident to all parties interested that it is solely the importance of the question at issue which has led to such kindly generosity on your part in granting so much space for free discussion.

In the remarks which I consider it necessary to make at this juncture I will endeavor to be as brief as I can, because I am well aware that space in American journals is valuable.

Let me at once say that the criticism contained in your leading article is on the whole fair and reasonable.

But in the opening paragraph you refer to the Liverpool contract as making "impracticable requirements." Since my previous letter was written my firm has purchased some 2,000 tons of meal on the basis of the form of contract in question, so that with all deference to your opinion I say that the requirements of that document can hardly be deemed "impracticable," seeing that business is being done on those lines, and it ought to be added that the deliveries made are satisfactory.

Then again you observe that:—

"The extraordinary requirements of the Liverpool buyers prompts the inference that the large dealers in and manufacturers of feed stuffs want cottonseed cake or meal with high percentages of both protein and oil so as to admit of the admixture by themselves of larger proportions of low non-nitrogenous products and still keep their specialties up to a standard that will command full prices in competition with other feeding stuffs."

Now allowing this to be correct—which I respectfully submit it is not—I would ask—What does it matter as to the purpose for which a buyer required an article of given standard, so long as he is willing to pay the price demanded for it?

But the fact is you are under a great misapprehension in supposing that this article is necessarily required for mixing in compound foods, because a very large portion of the British import is not used for mixing at all.

Some weeks ago I had the pleasure of a call from Mr. L. W. Haskell, the vice-president of the Southern Cotton Oil Co., New York. In the course of conversation I discovered that he too was under this impression; but I was able to demonstrate to him that it is quite a delusion; and further, that there are purposes for which a meal containing less than 52 per cent. oil and albuminoids is altogether useless. Before leaving, Mr. Haskell explained that if his company had to supply a meal for these purposes, the price would have to be fixed in accordance with the quality; which, of course, is common sense, and as business-like as one would expect any statement of Mr. Haskell's to be.

I come now to the letter written by Messrs. F. W. Brode & Co., but which is so lengthy that I am afraid to deal with all the points it raises. I must, however, touch upon some of them.

Messrs. Brode & Co. say "Liverpool buyers or manufacturers must have had very sad experiences in buying cottonseed meal." That unfortunately is only too true, but it will answer many of Messrs. Brode's statements if I say that the whole of the contracts in question were for "prime" meal, and "prime" meal alone. It is true that on arbitration the buyers were awarded allowances ranging between 5s. per ton and 30s. per ton, but this was poor compensation to buyers who were saddled with an article they did not wish to buy, and for which they had no use.

In order to make the position clear I subjoin particulars of some deliveries taken at random from the records of one of our best-known importing firms, who, it is fair to say, feel as keenly as the manufacturers the importance of this question. The contracts in all cases were for "prime" meal; the deliveries on those contracts were irregular, a delivery of the worst quality being frequently sandwiched between two deliveries to which no objection could be taken—all, be it noted, on the same contract, and consequently at the same price. The samples were analyzed by a competent chemist mutually agred on by buyer and seller, such samples having been first drawn and sealed by importer and buyer in the usual way.

The parcels consisted in almost every case of 2,240 bags, or 100 tons, I therefore omit reference to quantities:—

Arrived	Oil.	Albuminoids.	Total.	Woody fiber.
March 21.....	8.60	37.75	46.35	4.12
March 24.....	10.01	40.62	50.63	8.63
March 26.....	10.07	37.56	47.63	10.50
March 26.....	9.13	38.50	47.63	10.91
March 26.....	8.60	38.87	47.47	9.27
March 27.....	9.57	38.87	48.44	10.55
April 2.....	10.23	42.25	52.48	7.10
April 2.....	11.30	43.81	55.11	6.75
April 3.....	8.70	41.01	49.71	8.35
April 4.....	9.43	38.38	47.81	9.85
April 4.....	9.47	36.88	46.35	10.65
April 4.....	9.57	37.25	46.82	10.58
April 10.....	7.30	39.01	46.31	10.25
April 30.....	10.70	43.13	53.83	6.80
April 30.....	10.57	42.87	53.44	6.80
May 26.....	7.90	41.12	49.02	8.55
May 29.....	9.93	38.63	48.56	10.93
May 29.....	10.00	43.04	53.04	4.03
June 5.....	9.37	40.63	50.00	8.56
June 7.....	11.07	42.00	53.07	7.77
June 16.....	8.80	45.25	54.05	6.53
June 23.....	9.01	40.12	49.13	9.52
July 22.....	11.60	39.38	50.98	9.52

The most astonishing statement made by Messrs. Brode & Co. is the following:—

"The price and quality of cottonseed cake and meal are the same as they have been for over twenty-five years that we have been in the business. The men who operated oil mills then, and who run them now, make the same high standard of cake and meal."

My association with the trade—I regret to have to make the confession that I am no longer young—covers rather more than the twenty-five years of Messrs. Brode & Co., and my opinion as the result of my experience is distinctly opposed to theirs. Where and what, I ask, are the brands of cake to-day that are equal in quality to those of twenty or thirty years ago, such, for example as "Bienville," "HBW," "JJP," "Maginnis," "SOW," "San Antonio," "AAA," "La Grange," "HS," "LROC," etc.?

Such cake cannot be found to-day, and it is therefore idle to tell us that the quality of cake is the same as it has been for over twenty-five years. It is not, Mr. Editor, and you know it is not; and if Messrs. Brode do not equally know that it is not, then I say they have learned very little in the twenty-five years they claim to have been in the trade.

As to the parties at fault, the parties whose actions have led English buyers to insist upon a reasonable and easily attainable standard, I have nothing to say. They may have been the manufacturers, though I hope not; they may have been the dealers, I hope not; they may have been the shippers, I hope not. The blame must be apportioned and distributed on your side. But whoever is culpable I can confidently assure Messrs. Brode & Co. that English buyers, rightly or wrongly, make the date of the deterioration in quality synchronize with the introduction of the Lehman Johnson process for the admixing of cottonseed hull bran. It would be improper on my part to suggest that Messrs. Brode & Co. have any knowledge of this process. I will therefore simply say that they may learn particulars from the U. S. Specifications of Letters Patent No. 691,342, Jan. 14, 1902.

One word regarding the future. It is in reply to the last paragraph in your leading article. The buyers on this side are hardly likely to recede from the position they have assumed. In the first ten days of the present month about 7,000 tons of meal were sold on the "Liverpool Contract" for consumption in Liverpool alone, and there is no lack of sellers today on the same basis and at gradually decreasing prices. And yet the buyers could have filled their requirements on the "old contract" at lower figures, but they preferred to pay, and I venture to say they will continue to pay, the extra price demanded, in order to make certain of obtaining the article which is suited to their needs.

In conclusion, perhaps you will allow me to explain the position by a simple illustration! Boots—in this country at any rate—are of two descriptions, those made by hand, and those made by machine! The hand-made boot is the more costly. Now it does not satisfy the buyer of a hand made boot to be assured by the bootseller that a machine-made boot is better, or as good, or more suitable, or cheaper, or more fashionable. The buyer wants the hand-made article, and is willing to pay the price demanded! If that particular bootseller cannot, or will not, supply the article, he will lose business. It may be true that the buyer's field of operations may be a little more circumscribed than that of some other buyer who will accept either class of boot. But in the long run he will get what he wants, always assuming that he is willing to pay the price required for the quality demanded.

This is just what the Liverpool manufacturers are willing to do, and so far they have experienced no trouble in making their purchases on terms which appear to have achieved some notoriety and are now known as the "Liverpool Contract." Yours faithfully,

T. C. McCay.

OBITUARY.

Reuben Daniel.

Reuben Daniel died on Friday night, October 31, at a sanitarium at White Plains, N. Y., in the 90th year of his age. The funeral took place on Monday, November 3, at Greenwood Cemetery in Brooklyn.

Mr. Daniel will be recalled by the older members of the drug trade as one of the firm of Daniel & McCotter, drug brokers. He was born at Dedham, Mass. In July, 1857 he went with Fahnestock, Hull & Co., dry goods merchants, and it was one of his reminiscences that he used to sell goods to H. B. Claflin, then in the dry goods business in Worcester, Mass. He subsequently went into the drug brokerage business, having bought out the firm of Wood & Ohlen. In 1865 he joined Samuel G. McCotter in the firm of Daniel & McCotter, the business continuing during about 11 years. He retired from business about 15 years ago. He was the last of his immediate family, his wife, a son and a daughter having died several years ago.

Marcus Simpson.

Marcus Simpson, manager of the Portland Linseed Oil Works, died in Portland, Ore., October 25. His death was sudden and unexpected, and the cause heart disease. He was born in the north of Ireland, on January 1, 1840. At the age of 17 years he came to America and settled shortly after in Chicago, where he was engaged in the paint and oil business. In 1875 he moved to Burlington, Ia., establishing there a business of the same nature. In 1880 he entered into partnership with F. B. Jaggar and embarked in the linseed oil business. Later the Burlington Linseed Oil Company was incorporated and Mr. Simpson was one of the incorporators and directors. He was elected secretary, treasurer and general manager of the company, and continued as such for many years, enlarging and promoting the business and becoming prominent in business circles throughout that section of the country.

MISCELLANEOUS.

New Corporations.

The Walter F. Ware Co., at Camden, N. J., to manufacture medicines, etc. Capital, $125,000. Incorporators, Chas. H. Snyder, John M. Bateman, Harry D. Moore.

The Miller-Butcher Drug Company, at Colorado Springs, Colo. Capital, $10,000. Incorporators: David Y. Butcher, John K. Miller, Eugene A. Sunderlin.

The Jarvis Bromoline Drug Company at Baltimore, Md. Capital, $25,000. Incorporators, Harry C. Jarvis, Sydney C. Long, Clarence E. Downes, William C. Connolly, Dr. Hamlet Jarvis.

The Lenox Sprayer and Chemical Co., at Portland, Me., to make all varieties of spraying apparatus. Capital, $50,000. President, J. F. Fanning, and treasurer, F. C. Payson, both of Portland, Me.

The United Drug Co. at Trenton, N. J., to manufacture drugs and chemicals. Capital, $50,000. Incorporators, Edward D. Calhoun, New York; William C. Bolton, Brooklyn; Adolph Spiegel, Milwaukee; Edward L. Scholtz, Denver; Henry C. Hall, Waltham, Mass.; George C. Lyon, Providence, R. I.; Charles A. Rapelye, Hartford, Conn.; Thomas Voegeli, Minneapolis; James T. Weatherall, Boston; Louis K. Leggett, Newton Center, Mass.

N. W. D. A. Committee Change.

Chairman C. F. Shoemaker of the Committee on Proprietary Goods of the National Wholesale Druggists' Association has issued the following notice to the trade:—

I desire to advise you that at the recent meeting of the N. W. D. A. at Monterey, I relinquished the office of chairman of the Proprietary Committee, and Mr. John N. Carey, of the Daniel Stewart Co., Indianapolis, Ind., was unanimously elected as my successor. On behalf of the new chairman, I bespeak for him a continuance of the courtesy and consideration which have been shown to me while occupying the position during the last two years.

The headquarters of the committee have now been transferred to Indianapolis, and all correspondence in connection therewith should from this time forward be addressed to Mr. Carey.

In addition to the change in the chairmanship of the committee, a new office, that of vice-chairman, was created, and to this position Mr. F. E. Holliday was unanimously elected. All those who are familiar with the tactful and diplomatic work which Mr. Holliday has performed on behalf of this Association will be glad to know that his efforts in this direction are to be continued, and that additional

PAN-AMERICAN EXPOSITION
GOLD MEDAL Awarded to
KEYSTONE GELATINE
SEND FOR SAMPLES AND PRICES.
Manufactured by MICHIGAN CARBON WORKS. Detroit
AMERICAN GLUE CO., Selling Agents, 415 Atlantic Ave., Boston.

dignity and permanence have been given to his official connection with us.

Mr. J. E. Toms, who has faithfully served as secretary to the Proprietary Committee for more than six years, and who is now also secretary of the N. W. D. A., will, of course, also remove to Indianapolis and give to the new chairman the benefit of his long experience and knowledge in regard to the work coming before the committee.

In retiring from the chairmanship, I wish to express my appreciation of the unvarying courtesy with which I have been treated by the members of the various branches of the trade with whom I have been brought into contact. The work required has at times been arduous, but it has had its compensations. The experience gained I consider most valuable, and I shall retain only pleasant recollections of my connection with the position.

To Control Glue Manufacture.

It is asserted that the Glue Corporation, which was incorporated in New Jersey last week with a capital of $6,000,000, has been organized for the purpose of taking over the American Glue Co. In this connection the Boston News Bureau says:—

"A lively fight for the control of the American Glue Co. is apparently in prospect, judging from recent circulars sent to stockholders. The company is a New Jersey corporation formed August 1, 1892, by a consolidation of various rival glue companies, principally the companies controlled by D. Webster King and W. King Upton, who are president and vice-president, respectively, of the American Glue Co.

"There are some 200 stockholders in the company, which is capitalized for $1,600,000 8 per cent. cumulative preferred stock and $800,000 common stock. Of the above stock the King family own between 3,500 and 4,000 shares and the Upton family between 7,000 and 7,500 shares. The first knowledge of any disturbance in the relations between the managers of the business was the receipt of a printed circular within a few days, which stated that it was proposed to organize a corporation under New Jersey laws for the purpose of acquiring the capital stock and ultimately the properties of the American Glue Co., with $2,000,000 8 per cent. cumulative preferred stock and $4,000,000 common stock, all the stock to be issued to voting trustees for five years and beneficial trust certificates to be issued in lieu of stock during such period, the voting trustees being clothed with full powers to elect directors and vote upon all questions arising.

"For the present issue of stock voting trust certificates will be given on the basis of one share of new preferred and one share of new common for every share of American Glue Co. preferred stock and one share of new preferred and one share of new common for every two shares of old common stock. The Massachusetts Trust Co. is named as depositary, and D. Webster King, Everett J. Stevens, Andrew J. Ward and Augustus P. Loring are denominated a committee to carry out the above plan for lodging the control of the American Glue Co. with the new corporation. The King interests in the company are understood to be back of this movement and they claim to have a majority of the stock deposited under the plan.

"'The Glue Company' has now been formed under New Jersey laws as the vehicle to carry out the above plan and Tarrant P. King, son of D. Webster King, has been elected president of the new company. Minority stockholders claim that this is a scheme of the King family to secure perpetual control of the American Glue Co., and it is quite likely that counsel will be employed on both sides and a bitter struggle ensue. There is a New Jersey statute which provides that control of a New Jersey company cannot be turned over except by a two-thirds vote and the Upton interests of over 7,000 shares prevent the securing of such a majority.

"The American Glue Co. is paying 8 per cent. dividends on its preferred stock and 4 per cent. on the common stock, which securities are selling at about 130 and 60, respectively.

"The last annual report of the company, dated May 31, shows: Surplus June 1, 1901, $59,194; net earnings June 1, 1901, to June 1, 1902, $170,038; total, $229,233. Dividends, $132,028. Balance June 1, 1902, $97,204.

"The assets and liabilities as of May 31 were: Assets—Cash and receivables, $601,713; merchandise, manufactured and in process, $1,285,772; real estate, machinery and fixtures, $635,117; corporations owned, $247,002; patent rights and good will, $800,000. Total, $3,569,606. Liabilities—Preferred stock, $1,304,300; common stock, $800,000; debts, $309,000; profits reserved as working capital, $400,000; profit and loss, $36,305. Total, $3,569,606."

Baltimore Drug Trade Bowlers.

The James A. Baily & Sons team won three straight games from the Roots and Herbs team in the Wholesale Drug League series on the 1st inst. It was the latter's only defeat this season. Following are the scores:—

JAMES A. BAILY VS. ROOTS AND HERBS.

Jahries....	134	172	136	Kabernagle	151	157	150
Mackall...	167	178	136	Beaumont.	178	149	137
Ryers.....	156	186	187	Whitaker..	126	116	158
Holzerman	167	147	185	Millbourn...	136	146	113
Fairley....	151	192	130	Davis.....	153	173	156
Totals...	775	875	774	Totals....	744	741	723
Team average, 808.				Team average, 736.			

The National Drug Company team won all three games from the Armstrong Cork Company on the 3d inst. Ellicott made high score, 189, and Dickson made high average, 152 2-3, for the Corks; Owens made high score, 177, and G. Ames high average, 161 1-3, for the Drug Company. Scores:—

NATIONAL D. & P. CO. VS. ARMSTRONG CORK CO.

Baugher...	171	160	152	Alles.....	106	148	187
F. Ames...	114	139	143	Dickson....	143	106	149
Owens.....	177	165	124	Hoffman...	146	147	139
G. Ames...	154	161	169	Spedden...	172	104	159
Smith.....	144	133	163	Ellicott....	189	151	101
Totals...	760	758	751	Totals....	756	716	735
Average, 756 1-3.				Average, 735 2-3.			

On the 4th inst. the James Baily & Son team won all three games from the Stanley Brown Company. Scores:—

JAMES BAILY & SONS VS. STANLEY BROWN COMPANY.

Ryers.....	153	186	131	Muller.....	155	125	189
Mackall...	131	168	161	Winkelman	190	135	157
Holzerman	146	182	158	Kornmann.	148	125	166
Fairley....	172	150	201	Vordemberg	148	134	134
Jahries....	189	126	181	Brauer.....	149	166	168
Totals...	791	812	832	Totals....	790	685	814
Average, 801 2-3.				Average, 763.			

Japanese Ginseng Trust.

The State Department has received from Minister H. N. Allen, of Seoul, a clipping from the Japan Daily Mail in regard to a ginseng trust that is said to have been formed in Japan, with the co-operation of the Japanese syndicate that at present controls the Korean output of the root. The article says:—

It is stated that a ginseng trust has been formed. The production of this root is not large. Korea gives 50,000 pounds, America, 20,000, and Japan, 40,000. There is a very great difference in price. The Korean Government, by uniformly maintaining a State monopoly and carefully controlling production, has managed to keep the price of Korean ginseng at 30 yen ($14.94) per pound. But the Japanese producers do not protect themselves in any way, and the result is that their ginseng brings only 1 yen (49.8 cents). Such is the statement made by a news agency which has supplied an item to Tokyo newspapers, but it is obviously an incomplete statement, for if the quality of the Japanese root were equal to that of the Korean, it is incredible that such a difference as 29 yen ($14.44) per pound should exist as a result of mere middlemen's manipulation. However, Messrs. Oshikura Masayoshi and Sayegawa Jitsutaro, having conceived the idea of a trust, have managed, it is said, to carry it through, and have secured the co-operation of the Mitsui Bussan Kaisha, which controls the trade in Korea.

Reappraisements of Importations.

The following reappraisement of merchandise has been made by the United States General Appraisers since our last report:—

27876.—Chemical salt, from Wm. Adolph & Co., London, August 12, 1902. White oxide tin, entered at £147 per ton; no advance.

Parties desiring to be brought in contact with concerns who offer bargains in machinery are respectfully referred to page 27 of this issue.

SPECIALTIES FOR THE VARNISH TRADE
Amyl Acetate, Refined Fusel Oil, and Soluble Cotton.
MAAS & WALDSTEIN, Manufacturing Chemists.
107 Murray Street, NEW YORK
ESTABLISHED 1876.

MAGNESITE MINES "MOURIKI"
(GREECE)
RAW AND CALCINED MAGNESITE IN LUMPS direct from my mines in Greece to all Seaboard-Ports of the U. S. A. at every quantity in first-class quality. RAW AND CALCINED GROUND direct from our works in Leiden (Holland) via Rotterdam & Amsterdam to all parts of the U. S. A.
J. J. van KOOLBERGEN, Greek-Magnesite-Mine-Owner. Leiden-Holland

AMERICAN STEEL & WIRE CO.
CHICAGO, NEW YORK.
COPPERAS
MADE AT WORCESTER, CLEVELAND, WAUKEGAN & DE KALB WORKS.
VENETIAN REDS & OXIDES OF IRON
WRITE FOR SAMPLES AND PRICES.

D. F. TIEMANN & CO.
MANUFACTURERS AND IMPORTERS OF
Colors and Paints
FOR ALL PURPOSES
CARMINE, Pure and Nacarat,
LAKES, Chatemuc. Rose and Scarlet,
ROSE PINK and DUTCH PINK,
VERMILIONS, English, American and Imitation,
BLUES, Soluble, Chinese and Prussian,
GREENS, C. R., Frankfurt, Excelsior and Chrome,
YELLOWS, C. R., Eureka, Claremont, Venetian and Chrome
DROP BLACKS,
LAMP BLACKS,
UMBERS, SIENNAS,
Ochres, Zinc Whites, Tuscan and Indian Reds
OXIDES, &c., &c.
44 & 46 Duane Street, - NEW YORK
Between Elm and Centre Streets.

PITTSBURGH PLATE GLASS COMPANY
Operating Ten Great Factories. We are Jobbers of
PLATE AND WINDOW GLASS
POLISHED PLATE MIRRORS,
BEVELLED PLATE, ART GLASS,
SKYLIGHT AND FLOOR GLASS,
OILS, BRUSHES, VARNISHES.
MIRRORS
The new plants at our various warehouses for the manufacture of Plain and Bevelled Mirrors are fully equipped to do silvering and beveling on a larger scale than any establishments in the country. We use the celebrated "DURAND" process of silvering, and with our improved facilities are prepared to furnish to the trade mirrors both plain and bevelled, guaranteeing satisfaction as regards quality and promptness of execution. Our American Beauties have superseded the use of German plates for furniture. See us about PATTON'S SUN PROOF PAINTS before buying elsewhere. The people are familiar with this brand, and ask for it. This fact, together with the high quality of the paint, makes it peculiarly the dealers' paint.
Our Warehouses, where complete stocks of Sun-Proof Paint and Glass in all lines are kept constantly on hand, are as follows:
NEW YORK, Hudson and Vandam Sts.; CHICAGO, 441-452 Wabash Ave.; ST. LOUIS, Cor. Twelfth and St. Charles Sts.; PITTSBURGH, 101-103 Wood St.; DETROIT, 53-59 Larned St., East; MILWAUKEE, 492-494 Market St.; DAVENPORT, 410-416 Scott St.; BROOKLYN, 635-637 Fulton St.; BALTIMORE, Daily Record Building; OMAHA, 1408-1416 Harney St.; BOSTON, 41-49 Sudbury St., and 1-9 Bowker St.; GREENSBORO, N. C., Greensboro Loan & Trust Co. Building; CINCINNATI, Broadway and Court St.; MINNEAPOLIS, 500-510 South Third St.; BUFFALO, 372-374-376-378 Pearl St.; PHILADELPHIA, 1012-1018 Filbert St.; CLEVELAND, 149-153 Seneca St.; ROCHESTER, N. Y., Chamber of Commerce Building; ST. PAUL, 349-351 Minnesota St.

RAPID-SELLER PAINT SPECIALTIES:
Neal's Carriage Paints. Davies' Varnish Stains.
Acme Household Paints. Granite Floor Paints.
Neal's Enamels. Wagon and Implement Paints
Made by the Acme White Lead & Color Works Detroit, Mich.
COLORS-- Dry, in Oil and Distemper. PAINTS, ENAMELS, VARNISHES, FILLERS, STAINS, ETC.

PAINT MARKET.

NOTE.—Our prices are for large lots except when otherwise specified, and buyers of small quantities must expect to pay an advance on these figures. Complete prices current will be found on page 34.

Saturday Evening, Nov. 8, 1902.

The intervention of a holiday and the distraction of election time have had a more or less unsettling influence upon business and the market has been rather quiet since our last. Consumption, however, continues on an exceptionally large scale, the open weather being favorable to the prosecution of painting operations, and every opportunity is being taken of it. At the present time the market presents no special features except its steadiness, price changes being rare and unimportant.

White Lead, Zincs, Etc.

WHITE LEAD.—Even though the week has been broken by an exciting election throughout the country, there is no falling off in the demand for lead in oil, for prompt delivery. Though corroders have been behind with their orders, they are now catching up, as with the near approach of cold weather dealers are conservative in their buying and only take such lots as their current wants require. Prices are steady, especially for special brands at 5¾c. less the regular 2 per cent. discount for old process and at 5½c. for quick process, though in special cases 5½c. less the usual discount term has been accepted. There is still a scarcity of dry lead for delivery outside of the regular contract deliveries and what available stock comes to the surface readily commands 4¾c. and upward, as to the size of the order, less the usual 2 per cent. discount, either old or quick process. The annual meeting of the National Grinders' Association will be held on the 11th and 12th in this city, at which it is expected a full representation of the grinders from all parts of the country will be present. No change in foreign makes of lead in oil, which are meeting with the usual jobbing demand at 9⅛@9¾c. for the old established brands and for others not so well known at 7c. and upward, as to make and quantity. As yet no intimation is given out regarding prices for dry lead for next year.

RED LEAD.—There is a slight falling off in the demand outside of regular contract deliveries of old process makes, stocks of which continue light and prices are well sustained at 5¾c. and upward, as to quantity, less the usual discount terms. Less complaint is heard about the delay in transportation by the railroads, though they are still to some extent giving coal shipments the preference. German is jobbing fairly well at 6¾c. for ordinary and 7¾c. and upward, as to quantity and seller for extra grades, as to date of delivery. English is meeting with the usual jobbing demand at 6¾@8c., as to grade, quantity and seller.

LITHARGE.—The unusual demand from the large consumers, such as the rubber, glass and oilcloth makers, who are drawing freely upon their contracts, is causing a scarcity of stocks for prompt delivery. Further sales are reported for prompt delivery at 5¼c. for old process and 5c. and upward for quick process, as to brand and quantity, less the usual discount terms, There are reports current that prices may be advanced should present demand continue.

ORANGE MINERAL.—French 's without special feature, the demand being confined to regular contract deliveries at 11¼c. for special brands and 10½c. and upward for other makes as to quantity, less the usual terms of sale. German is not overplentiful on the spot and prices are steady at 8½@9c., as to grade and size of the order. English is quiet but steady at 8¾c. and upward, as to grade, quantity and seller. Domestic is in light stock, and consumers have to be satisfied with what stock makers can give them upon their contracts. Prices remain steady at 7¾@8c., as to quantity less the usual discount terms.

PIG LEAD.—Trading has been rather slow at St. Louis during the week and prices are a shade easier at 4c. for soft and this bid for chemical. In this section the usual jobbing demand prevails at 4.12c. for common and 4.20c. and upward for refined as to quantity and terms of sale. London cables soft Spanish at £10 13s. 9d.

ZINCS.—There has been considerable business done in addition to regular contract deliveries for delivery over the balance of this year for the home trade. The export demand is also improving and further business is reported at satisfactory prices. As yet no announcement has been made regarding prices for next year and for the present we continue our quotations of 4⅜@4⅝c., as to grade, quantity and terms of sale for the various brands of the New Jersey Company's make.

Dry Colors.

REDS.

There is still a considerable demand for Venetian red, though the bulk of the business is in the nature of deliveries on orders previously booked to be sent forward before the close of navigation. Prices rest on a very steady basis, quotations on both imported and domestic being held closely up to the figures heretofore given. In the chemical reds, while business is not active, it is considerably better than usual at this time of the year and prices have firm support.

BLACKS.

Conditions show little change in the market for black pigments. The consumption of both carbon and lamp blacks continues very heavy, and between new business and the making of deliveries on old contracts manufacturers are kept very busy. There is a steady tone to the market notwithstanding active competition, and prices are unchanged. For ivory and drop black the demand is about up to the average for the season and prices are as heretofore quoted.

BLUES.

There is still a fairly active demand for the blue pigments from some classes of consumers, but others seem to have about completed their purchases for the season and the market has a quieter appearance. The deep staining blues are all wanted to a greater or less extent, but other descriptions move more slowly. A steady feeling prevails all along the line and prices are unchanged.

BROWNS.

There is little in the way of new business to record in this department, buyers drawing supplies mainly on contracts. The market has a steady tone, however, and we hear of no price changes in either domestic or imported kinds.

GREENS.

The market remains quiet, and we hear of no business of consequence of any kind. Prices are unchanged.

YELLOWS.

For the chemical yellows the demand is still rather above the average for the season, though we hear of no important transactions. The demand for ochers continues fairly active and deliveries on previous purchases are going forward freely. The market has a firm tone and prices are unchanged at 1½@2c. for Rochelle ocher, 3½@4c. for golden, 1¾@1⅞c. for washed French, 4¾@5c. for washed Dutch, and $10@15 per ton, as to quality and quantity, for domestic.

Metallic Paints.

Consumption is still large, the volume of business being considerably in excess of the average for this time of the year, with every indication that the activity will continue beyond the end of the current month. There is no change in prices, the market being firm at $19.50@20 for brown and $16@18 for red metallic oxide.

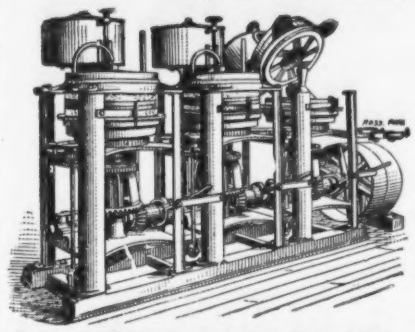
Miscellaneous.

BARYTES.—The market is quieter, new business being on a smaller scale, but deliveries on contracts still continue quite free. The market remains firm and prices are unchanged.

CHALK.—Consumers continue to supply their wants with purchases on the other side for forward shipment, and in the absence of offerings here prices are nominal.

CHINA CLAY.—A fair business is being done in English grades, though it is mainly on small orders. The steady tone of the market is retained.

NEW DESIGNS
MILLS
AND
MIXERS
For Grinding and Mixing
All Materials



Factories Fitted up Complete and Ready for Work.
CHAS. ROSS & SON CO.
MANUFACTURERS
16, 18 & 20 Steuben St., Brooklyn, N. Y.
Gang of Water Cooled, fine Color Mills.
20 minutes from New York City Hall, via Bridge and Flushing Ave. cars.

ALL PAINT EXPERTS AGREE ON THESE POINTS

1. That the best paint base is not a single pigment, but a combination of pigments.
2. That Zinc is essential for purity of tone, oil absorbing power and hardness of coating.
3. That Lead is necessary for body and opacity.
4. That these two pigments properly combined make the best practicable white paint base.

STANDARD ZINC LEAD WHITE

is a compound of pure oxide zinc intimately combined by sublimation with pure lead in its most permanent form. The union, being practically molecular, surpasses in intimacy anything obtainable by mechanical means; the pigments are "one and inseperable." It is the simplest, most permanent, most convenient, most economical paint base available to the grinding trade.
NOTE.—Both process and pigment are protected by letters patent, and any infringement by manufacture will be rigidly prosecuted.

THE UNITED STATES SMELTING CO.
(Successors to THE AMERICAN ZINC LEAD SMELTING CO.)
CANON CITY, COLO.
E. H. HAINES, Sole Agent for the Eastern and Middle States and Canada.
1401 Ashland Block, Chicago, Ill.
PROMPT SHIPMENTS MADE FROM CANON CITY OR CHICAGO.

EDWARD HILL'S SON & CO.
25 & 27 Cedar St., NEW YORK.
Ceylon and Cochin Cocoanut Oil, Double Star Citronella, Caustic and Carbonate Potash, Opium, Arsenic.

VARNISH GUMS
ROTTEN STONE
R. J. WADDELL & CO. 52 Beekman St., NEW YORK
IMPORTERS AND GRINDERS
Pure Ground and Bolted English Rotten Stone
Selected Lump Rotten Stone

We are the originators of
Permanent Para Reds
Made in 42 Shades for Paint Purposes.
For Strength, Brilliancy and Uniformity cannot be equalled.
Untoned with Eosine, Scarlet Lake, or other Fugitive Colors.
We guarantee our Colors to be Permanent. Write for Specimen Cards and Prices.
THE CLEVELAND COLOR CO., Cleveland, O.
London Office, 12 Lime Street.

AGENTS FOR
Sissons Bros, & Co., Ltd.
HULL, ENG.
Manufacturers of the Crown Brand of GOLDEN CHROME, Patent Dryer, Paris White, Drop Black, Etc.
AGENTS FOR
Henry Grace & Co.,
LONDON, ENG.
Manufacturers of WHITE LEAD, ETC.

Reinhardt
59 Frankfort St. & 19, 21 & 23 Jacob St.
NEW YORK.
Selling Agent for Chicago:
Edward Keir, 39 River Street.

AGENTS FOR
The Hull & Liverpool
Red Oxide Co., Ltd.,
St. Helens and Hull, Eng.
MANUFACTURERS OF
Double and Triple Crown Venetian Oxides, A.A.A.A. and other Venetian Reds, Indian Reds, Oxides of Iron, Crocus, Etc., Etc.

PAINTS FOR GRINDERS' USE.
IMPORTERS OF
French and other Ochres, V. M. French Zinc, English B. B. White Lead, China Clay, Vandyke Brown Orange Mineral, Talc, etc.
GRINDERS OF
Turkey Umbers, Italian Siennas, Bone and Ivory Black.

It is more profitable to supply an already existing demand than to attempt to create a new one. It is easier to sell these well known brands of Pure White Lead that have earned a reputation for excellent quality and are known to give permanent satisfaction, than it is to convince people that other materials which have not proved their durability by actual use in your own neighborhood are "just as good."

ARMSTRONG & M'KELVY	Pittsburgh.
BEYMER-BAUMAN	Pittsburgh.
DAVIS-CHAMBERS	Pittsburgh.
FAHNESTOCK	Pittsburgh.
ANCHOR	Cincinnati.
ECKSTEIN	Cincinnati.
ATLANTIC	New York.
BRADLEY	New York.
BROOKLYN	New York.
JEWETT	New York.
ULSTER	New York.
UNION	New York.
SOUTHERN	Chicago
SHIPMAN	Chicago
COLLIER	St. Louis.
MISSOURI	St. Louis.
RED SEAL	St. Louis.
SOUTHERN	St. Louis.
JOHN T. LEWIS & BROS. CO.	Philadelphia.
MORLEY	Cleveland.
SALEM	Salem, Mass
CORNELL	Buffalo.
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NATIONAL LEAD COMPANY,

No. 100 William Street,

NEW YORK CITY.

Atlantic White Lead and Linseed Oil Co.

MANUFACTURERS OF

ATLANTIC WHITE PURE LEAD

ATLANTIC WHITE LEAD PURE WARRANTED ROBERT COLGATE & CO. TRADE MARK

AND

Atlantic Pure Linseed Oil

Raw, Refined and Boiled.

Also High grades for Varnish Makers and Printing Ink Manufacturers.

Our well known "DIAMOND V" Varnish Oil cannot be broken in boiling.

Red Lead, Litharge, Flake Litharge, Orange Mineral and ***Refined Glass Makers' Red Lead,*** unsurpassed for the manufacture of the finest quality of glass.

Lead Pipe, Block Tin Pipe, Solder and Babbit Metal.

100 William Street, NEW YORK.

Cawley, Clark & Co.,

MANUFACTURERS OF

PULP & DRY COLORS

Strongest Chrome Yellows in the Market.

Factory: 272 to 280 Passaic Street, NEWARK, N. J.

BLACKS

High Grade Lamp Blacks, Carbon Gas Blacks

DROP and IVORY BLACKS, PLUMBAGO.

Coal Tar, Creosote Oil, Naphthalene, Anthracene, Pitch.

THE WEGELIN & WILCKES BLACK MFG. CO., 50 Cliff Street, NewYork.

BEAVER & CO., MANUFACTURERS OF

FINE IVORY and DROP BLACK

FOR THE TRADE AND GRINDERS' USE.

LAMP AND CARBON BLACKS.

180 MILK STREET, BOSTON, MASS.

JOHN W. MASURY & SON,

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PAINTS AND VARNISHES

NEW YORK and CHICAGO.

NON-FADING REDS

BRILLIANT, UNIFORM. STRONG.

LEWIS BERGER & SONS,

OF AMERICA. LIMITED.

100 William Street, NEW YORK CITY

CARBON BLACK

—MADE BY—

GODFREY L. CABOT,

82 Water Street, BOSTON, MASS., U. S. A.

N B.—Carbon Black is also known as Hydrocarbon Black, American Gas Black, Satin Gloss Black, Jet Black, Silicate of Carbon, etc.

GRADES.—Eclipse, Elf [S], Elf [G], Sunset, Banner, etc.

SHIPPING POINTS.—Saxonburg, Lane, Butler, Ridgway, Craigsville, Pa.; Creston, W. Va.

STOCKS carried in New York, San Francisco, St. Louis, London, Paris, Hamburg, St. Petersburg, etc.

WRITE FOR SAMPLES AND PRICES.

BEST BLACKS.

We have always claimed that we made and sold the best Blacks, but *our* knowing it is not sufficient. We want *you* to know it.

The Jury of Awards at the Paris Exposition awarded us the gold medal, the Pan-American a silver medal, for superior quality, chemical purity, and density of color of Black Pigments, both of these awards being the highest in our class.

We make all kinds of Black Pigments—Carbon, Lamp, Ivory, Drop, Bone, Frankfort Blacks, etc. Our success in Black making is due to concentration, and the singleness of aim in making the best Blacks, and selling them at as low a price as possible, consistent with keeping every Black up to a standard of quality.

If you are looking for a better Black than that which you are using, or want a Black for some new use or some special purpose, write to us. If you have a Black doubt, send us the doubt and we will remove it.

Awarded Gold Medal, Paris, 1900.

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BLACK MAKERS,

81-83 Fulton St., NEW YORK.

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EASTON, PA., U. S. A.

Manufacturers of COPPERAS, also Manufacturers of UMBERS, RED AND YELLOW OXIDES, OCHERS, SIENNAS, BLACK AND DRY COLORS of every description. Proprietors of the Pennsylvania Dry Paint and Color Works, Easton, and the Helios Dry Color and Chemical Works and the Allentown Copperas Works of Allentown.

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MANUFACTURED FOR THE TRADE.

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P. O. Box 1546.

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Sole Agents in U. S. and Canada for

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COLORS for Printing and Lithographic Ink Makers; and for Paint Grinders
COLORS Soluble in Oils, Fats, Waxes and Naphtha.
COLORS for Confectioners, Warranted Free from Poison.
COLORS for Soap and Candle Makers.
COLORS for Varnish Stains.
COLORS for all purposes.

Write for Samples and Prices.

Infusorial Earth

HYDRATED LIME, (LIME FLOUR)

OXIDE OF CALCIUM.

THE ATLAS COMPANY

LINCOLN, NEW JERSEY.

Ochre and Fillers for all purposes.

LAMP BLACKS

IN BULK AND PACKAGES

OF UNEQUALLED QUALITY

We make Lamp Black of every grade and quality and will cheerfully submit prices and samples.

No connection with any combination.

ESTABLISHED [1866]

BIHN & WOLFF CO, BRIDESBURG, PHILA. PA.

FOUNDED 1793—INCORPORATED 1898.

Harrison Bros. & Co., Inc.

MANUFACTURERS OF

White Lead, Paints, Colors, Varnishes, Chemicals,

Philadelphia, Chicago, New York, Boston.

Trade Mark.

and prices are unchanged at $12@17.50, as to quality and size of order. For domestic also there is a fair demand, which is supplied at $8.50@10, as to grade and quantity.

FULLER'S EARTH.—A moderate business is going forward, at prices within the previously quoted range.

TALC.—In a jobbing way business is fair, but large buyers seem to show little interest in the market at present. All grades are held steadily up to the quotation, in the absence of disturbing influences.

TERRA ALBA.—The demand continues largely on the jobbing order, and we find nothing in the situation calling for special mention. The undertone of the market is steady, and prices remain as heretofore quoted.

WHITING.—Manufacturers are still far behind their orders, and there is little indication as yet of any abatement of the demand. Consequently the feeling is firm and prices are maintained at 45@46c. for commercial, 56@65c. for gilders', 62@68c. for extra gilders', 68@75c. for American Paris white, and 99c.@$1.10 for English cliffstone.

Mixed Paints and Colors in Oil.

The unusually fine weather is causing a prolonged painting season, with the result that the demand for mixed paints continues active. Beyond this, however, the market presents no special features. For colors in oil also, the demand is exceptionally good for so late in the year, and the market has a firm tone.

Glues.

Although production of domestic glues is heavy and seems to be increasing, consumption keeps pace with it, the demand being heavier than ever before in the history of the industry. Prices are steady and unchanged. For imported grades also there is a good demand and a firm market.

Varnish Gums.

The situation in this market has not changed. The demands of consumption are very large and while naturally kauries receive the bulk of attention other grades are not neglected. The market is very firm throughout, with a rising tendency.

Window Glass.

The market is still much unsettled, but steps are being taken to put it on a firmer basis. Business shows steady improvement, but the uncertain outlook to the present time has induced dealers and consumers to closely follow the hand-to-mouth policy in buying. The situation is reviewed in our editorial columns.

(Special Correspondence to The Reporter.)

Drawback on Varnishes and Japans.

Washington, Nov. 7, 1902.

Drawback regulations are about to be promulgated by the Treasury Department, establishing a rate of allowance of drawback on black varnishes and japans in the production of which has been used imported asphalt paying duty at the rate of $3 per ton under paragraph 93 of the existing tariff. These regulations, which are issued on the application of the Standard Varnish Works, of New York city, are as follows:—

"The entry under which the merchandise is to be inspected and laden must show the marks and numbers of the shipping packages and the contents of each package, separately, describing the same by their commercial designations, and giving the total quantity of each kind of varnish or japan shipped, in gallons and by weight. When the goods are shipped in cans, the number and size of cans containing each kind and description of varnish or japan must be shown, together with the total quantities of the several kinds in each case. All outside packages must be marked and numbered for identification, and all unit packages of whatever kind or description must be stenciled or labeled with the commercial name and with the quantity by volume and weight of their respective contents. The percentage by weight of the several solid ingredients used and appearing in the exported products and the total percentage of such ingredients must also be shown in the said entry.

"The drawback entry must show the quantities by volume and weight of the several kinds of varnishes and japans exported, and the quantity and percentage by weight of asphalt contained therein, respectively. The said entry must further show in addition to the usual averments, that the several exported articles were manufactured of the proportions of solid ingredients and in the manner set forth in the manufacturer's sworn statement and schedule.

"In liquidation, the quantity of asphalt which may be taken as the basis for allowance of drawback may equal the quantity declared in the drawback entry after official verification of exported quantities and weights and such analytical determinations as may be deemed requisite, but in no case shall the percentage of allowance exceed that shown in the manufacturer's schedule hereinbefore mentioned for each kind and description of merchandise exported.

"Samples may be taken or sworn samples furnished, as ordered by the collector, to be submitted to the appraiser for use in making required determinations.

"In case it should become desirable to manufacture for export other products of the same character, but under new formulas, entries covering the same may be liquidated on the filing by the manufacturers of supplemental sworn schedules covering such products, to be of the same form and in all respects as that hereinbefore mentioned."

Refining Graphite

Several inquiries having been sent from the United States to U. S. Consul-General O. J. Hughes, at Coburg, Germany, regarding the methods used in Germany for refining graphite, he furnishes the following information in reply thereto:—

I have just been informed that by the "Langbein Process," crude graphite is refined by grinding the powdered material with a calculated amount of ammonium fluoride, charging the mixture together with a certain volume of sulphuric acid into a hydrofluoric acid still and distilling. The evolved silicon is collected in a receptacle containing ammonia, with which it combines, forming ammonium fluoride suitable for using again, gelatinous silica being also produced. The partially refined graphite is separated and further purified by washing and subsequent heating with caustic alkali or alkaline carbonate solution. Finally, ammonium sulphate is recovered by neutralizing with ammonia the mixture of sulphuric acid and sulphates remaining in the still.

Parties desiring to be brought in contact with concerns who offer bargains in machinery are respectfully referred to page 27 of this issue.

BARREL PAINT

Best made. No grit, no sediment, no cutting of brushes, no waste, brilliant colors and great covering power. Send for Color Card and prices for paint delivered at your City.

EAGLE PAINT & VARNISH WORKS
PITTSBURG, PA.

MANGANESE
FOR ALL USES.
LUMP, GRAIN AND GROUND
60-70% 70-80% 80-90% OXIDE
CLAY WORKERS GOODS A SPECIALTY.
SAMPLES AND PRICES ON INQUIRY.
KENDALL & FLICK
WASHINGTON, D.C.

SHEET LEAD
COLWELL LEAD CO.
63 Centre St., New York
ALSO MANUFACTURERS
Chemical Lead Pipe, Lead Wire, Block Tin Worms, etc., for Chemical purposes.

PRINCE'S METALLIC QUADRUPLE LABEL
HAS NO EQUAL.
Best Grinding—Best Analysis—Best Price—A Natural Oxide—No Sulphur.
CLARKE & WHITE CO.
Mills, OSSINING, N. Y. 106 Fulton St., NEW YORK.

Ground PAINT GRINDERS' DRY COLORS.
FRENCH OCHRE A Specialty
J. A. & W. BIRD & CO.,
Boston Office, 34 India Street 88 Wall Street, NEW YORK.

Of By-Gone Days

Years ago one might fool a man into thinking that colors containing fish oil and benzine were as good as linseed oil colors.
But people know better to-day.
They know that absolutely pure linseed oil is the only oil fit to use in paint, and they know that it is the only oil used in

Moore's Pure Oil Colors

They know this from practical tests made on the strength of our advertising.
For the same reason they know all about the wonderful strength, the consequent real economy, the fineness, the permanency and the steadfast durability of these colors.
The dealer carrying our goods in stock will reap the results of our advertising—will be making money and making it easier than the dealer who isn't carrying our paints.
That's logic. That's common sense.
Prices, terms, color cards and samples sent upon request.

BENJAMIN MOORE & CO.
258 Water St.,
BROOKLYN, N. Y.
Western House,
CHICAGO, ILL.

Manganese ASPHALTUM VARNISH GUMS, &c.
JOHN S. LAMSON & BRO., 77 Maiden Lane, - NEW YORK

"EDUCATION

is essential and it will take time, money and patience to educate the painters," said a corroder, in discussing the ZINC WHITE propaganda. "So long as the painters remain uninformed, we're not afraid of zinc." Everywhere it is admitted that it is ignorance only that limits the use of zinc. But ZINC WHITE is itself an educator, and every pound of high grade paint that goes on any building anywhere is a silent argument of beauty, durability and economy This education is proceeding apace all over the land, and every manufacturer of good paints is helping the dissemination of useful knowledge. Painters everywhere are beginning to revise their old conclusions in the light of fresh facts, and this "education" is further advanced than might at first sight appear.

FREE.

OUR EDUCATIONAL PAMPHLETS FREE TO ANY ADDRESS:

"The Paint Question."
"Paints in Architecture."
"House Paints: A Commonsense Talk About Them."
"French Government Decrees."
"Specifications for Architects."

THE NEW JERSEY ZINC COMPANY

11 Broadway

New York

TRADE MARK FEROX REGISTERED JULY 8, 1902.

Mohawk Paint and Chemical Co.

SOLE MANUFACTURERS OF

Patent Iron Oxide Paints 98% Pure

19 Liberty Street, New York.

The Ideal Pigment for Wood and Metals.

The only adequate protection for Structural Iron and Steel Work for Buildings, Bridges, Ships, &c.

SEND FOR DESCRIPTIVE CIRCULAR.

SAMPLES AND PRICES ON APPLICATION

COLOR CARDS

AND PAINT SAMPLES

KINSEY & JOHNSTON, Cincinnati, O.

CORRESPONDENCE SOLICITED.

Talc.

All Grades, Producers' Quotations

E. S. JACKSON & CO.

Cincinnati, Ohio.

ALGONQUIN RED

is the best paint on earth. It is a natural paint, made by natural means. It is not a product of fire. It contains no acid, lime, nor gypsum. The basis of it is unfading red slate rock. Put up in dry, paste and ready-mixed form. Write for prices and printed matter. Algonquin Red Slate Co., 10 East Worcester str et, Worcester, Mass., Manufacturers of Paint, Elastic Roofing Cement, Roofing Slates, Tiles, Sinks, etc.

IF you don't want a scratched floor beware of the scratchy kind of varnish. It may look all right at first, but before long there will be scr tches and then will come the old, old tale—complaints, sending men up to patch it over, and a customer lost. If you want to be sure of your floor work use **No. 61 Floor Varnish.** You will find it is not the scratchy kind. It dries quickly, is exceedingly tough, it will **NOT** mar, it is **NOT** affected by water, and is the most durable floor finish made.

PRATT & LAMBERT,

Makers of Fine Varnishes.

NEW YORK, CHICAGO, BUFFALO.

TOCH BROTHERS

468-470-472 West Broadway,

Estab. 1848. *NEW YORK.*

Oleum White

Tochside Drier

Dutch Pink

Blanc Fixe

Alkali Proof Colors

All Shades.

STEVENS BRICK REDS

AND MILWAUKEE COLORS, ALSO STEVENS RED OXIDE

For first and second coats are the result of many years' experience. They are carefully prepared and ground for the purposes required. Send for Color Cards to the Manufacturers

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Manufacturers of White Lead, Colors in Oil, Mixed Paint, Wood Stains, Etc.

E. S. BELKNAP—McSHERRY & MORAN CO.

Successor to E. S. BELKNAP MFG. CO.

Office and Factory, 286 Monroe St., New York

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Oldest PUTTY Establishment in the United States

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CHARLES EARL CURRIE & CO., IMPORTERS

LOUISVILLE, KY.

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Gum Shellac, Gambier, Sumac, Cutch, Dye Stuffs, &c.

MANUFACTURERS OF

Bleached Shellac & Shellac Varnish Columbian Spirits & Refined Wood Alcoho

Telephone: 6090, 6091 Cortlandt.

THERE'S CHARACTER AND GENUINE MERIT IN THE

COACH COLORS

MANUFACTURED BY

JOHN LUCAS & CO., Philadelphia, New York, Chicago

Send for Mail Samples and Prices.

GERMAN POWDERED BARYTES (Sulphate), "SWOOO," "LION," GOOO.

CRUDE BARYTES (Sulphate), CARBONATE OF BARYTES (Precipitated),

CHLORIDE OF BARIUM, BLANC FIXE, SATIN WHITE,

NITRATE OF BARYTA and STRONTIAN.

LITHOPONE, representing Mess. Sachtleben & Co. (Cologne, Homberg), Germany.

OXIDE OF ZINC, representing Mess. Lindgens Soehne, Muelheim a/R. Germany.

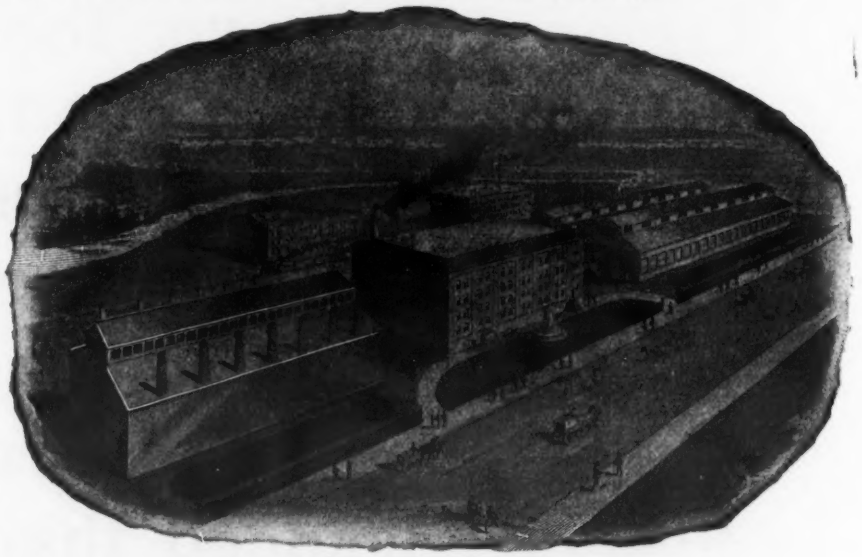
DRIERS OF ALL KINDS, DRY COLORS, Etc.

IMPORTED BY

GABRIEL & SCHALL, 205 PEARL STREET, NEW YORK.

THE DAVIS LEAD COMPANY, OF PITTSBURGH.

THE MOST MODERN AND COMPLETE WHITE LEAD WORKS IN THE COUNTRY.



MANUFACTURERS OF

STRICTLY PURE WHITE LEAD—DRY AND IN OIL.

VERY FINE—VERY WHITE AND VERY SUPERIOR.

MADE BY OLD DUTCH PROCESS.

THE MOST BRILLIANT RED LEAD FOR PAINTING.

PURE ORANGE LEAD FOR COLOR MAKERS.

PURE POWDERED LITHARGE.

REFINED GLASS MAKERS' RED LEAD AND LITHARGE.

SUPERIOR VARNISH MAKERS' RED LEAD AND LITHARGE.

THE DAVIS LEAD COMPANY,

OFFICE—PARK BUILDING. PITTSBURGH, PA.

ALWAYS UNIFORM

"WHAT'S IN A NAME?"

Time was when the brand on a keg of white lead conveyed an individuality. It was made by certain people, in a certain way, at a certain factory, and the buyer of it felt assured, to a measurable extent, as to what he was buying. Common ownership has changed all that and no man knows to-day how or where the lead bearing his old favorite brand was made.

BAILEY PROCESS WHITE LEAD

(OLD DUTCH PERFECTED)

Is exceptional in this as in all other respects. Not only is it always uniform and uniformly the best white lead produced any where by any process, but it is made always by the same process in the same way and under a single brand. Get the brand fixed in your mind before buying lead.

White Lead.
Lead Oxides.
Sheet Lead.
Lead Pipes.
Lead Traps.
Linseed Oil.

Union Lead & Oil Co.

Office: 32 Liberty St., NEW YORK

Factory, 81 Front Street Brooklyn. N. Y.

KENTUCKY REFINING CO.,

LOUISVILLE, KY., U. S. A.
Cable Address, "REFINERY," LOUISVILLE.

MANUFACTURERS AND REFINERS OF ALL GRADES OF

COTTON SEED OIL,

Summer and Winter Yellow Oil.
Yellow and White "Miners'" Oil.
Crude C. S. Oil, "Red Star" Soap, Soap Stock.

SPECIALTIES:

"DELMONICO" COOKING OIL.
"ECLIPSE" BUTTER OIL.
"SNOWFLAKE" PRIME SUMMER WHITE.
"NONPAREIL" SALAD OIL.

CAKE, MEAL, LINTERS, ASHES, HULLS.

The American Cotton Oil Company

MANUFACTURERS AND REFINERS.

Cotton-seed Products

Oil, Cake, Meal, Linters, Ashes, Hulls.

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American Linseed Company

Manufacturers and Refiners of

Linseed Oil, Cake, Meal and Ground Flaxseed

"LUBRIX" DRILLING COMPOUND, PURE LINSEED OIL SOAP

SPECIAL OILS

RAW,	CALCUTTA VARNISH,	VACUUM RAW,
BOILED,	CLEVELAND RAW,	DEAN REFINED,
BLEACHED,	SPECIAL "A,"	C. & T.
P. M. P.,	CLEVELAND VARNISH,	CLEVELAND REFINED,
CALCUTTA RAW,	LEAD GRINDER'S OIL,	C. V. (DOMESTIC).

American Linseed Company

100 William St., New York — Manhattan Bldg., Chicago

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SPENCER KELLOGG,

LINSEED OIL

BUFFALO, N. Y.

INDEPENDENT CRUSHER. Capacity 15,000 Bushels Daily.

EUSTON & COMPANY.

LINSEED CRUSHERS, OIL BOILERS And REFINERS,

CABLE ADDRESS—EUSTON. CHICAGO. ILL.

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COTTON SEED OIL

Winter White Winter Yellow
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CHURN BUTTER OIL

Cable Address: Globe Louisville. TANK CARS FREE.

J. J. CAFFREY, PRESIDENT, CHAS. P. FINK, SECY. & TREAS.
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REFINERS OF ALL GRADES OF

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Specialties:

"LOUISVILLE" BUTTER OIL. "PROGRESS" BUTTER OIL.
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YELLOW AND WHITE MINERS' AND SOAPMAKERS' OILS,
"IDEAL" PRIME SUMMER WHITE FOR COMPOUND LARD.
"LOUISVILLE" STAR SOAP.

(OFFICE AND REFINERY)
Floyd and K Streets
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CABLE ADDRESS:
Cottonoil Louisville

Tank Cars Free for Sales or Purchasers
CODES USED:
Private, Twentieth Century and A-B-C Fourth Edition.

LOUISVILLE, KY. U. S. A.

OIL MARKET.

NOTE.—Our prices are for large lots except when otherwise specified, and buyers of small quantities must expect to pay an advance on these figures. Complete prices current will be found on page 84.

Saturday Evening, Nov. 8, 1902.

Vegetable Oils.

LINSEED.—The advance in the seed market during the week has imparted more strength to the oil situation and crushers are less inclined to press sales of round lots either on the spot or for forward delivery. Buyers' views are still around 40 to 42c. for future for December-March delivery, but sellers are indifferent about selling even at 43@44c. The jobbing demand is unusually good, though there are signs of a let-up, which is to be expected as the winter approaches. State and Western oil is selling at 44c. and city at 46c., with very little second-hand oil being offered at 43@44c. Our Chicago letter gives the seed situation more in detail.

COTTONSEED. — There has been more activity to the market and sales have been more free for prompt and forward delivery. The chief reason of this activity arises from the fact that purchases have been made to cover sales made some weeks ago and deliveries should have been made ere this, but the railroads have sidetracked all the tank cars in transit to allow coal shipments to be rushed through. This has and is causing great annoyance to sellers, who are helpless and apparently have no redress. Mills who have made sales and have their tanks held up say they have trouble enough without selling further lots of oil, with no immediate prospect of having their shipments promptly delivered. But for these delays in arrivals there would be a surplus of cotton oil and prices would have eased off ere this. There has been considerable business done with Western packers and refiners, with sales upward of 16,000 bbls. bleaching oil for December and January at 33c., and February to September at 33½c. loose, delivered here. There are further offers of 33c. loose for 12,000 bbls. more of same grade of oil for February forward, but so far it has been turned down. There also have been sales of prime yellow for November-December to cover the shortage mentioned above, and for May delivery 100 bbls. at 35c., and yet these sales have had no influence on the market, which closes easy under free offerings for prompt and forward at 34@34½c. The strength of the market this week has been due to the light offerings of both crude and refined, and with any pressure to sell on the part of the mills, unless accompanied by a corresponding increase of demand, either for home consumption or for export, values undoubtedly will ease off, though not possibly until rail transportation improves or the holiday season sets in. Foreign buyers are indifferent, as recent purchases are now arriving to cover current wants, and what bids are being made are for future delivery and are from 1 to 2c. below this market, as our telegrams show. There is not much demand for crude oil, though one large Western buyer was in the market for 10,000 to 25,000 barrels for November forward, but no one was inclined to name a price that might lead to business and put the market up on themselves, but rather preferred to sell a few single tanks and not disturb the market. There have been sales of soap stock at 1.10c. f. o. b. Houston, Texas, and at 1.25c. f. o. b. Memphis, but at the close under free offerings buyers have reduced their bids, and 90c. f. o. b. mills was the best bid at the close. Several sales of white and winter yellow oils are reported for December and January at 37½c. for the former and 37c. for the latter. The market closes easy at 27½@28c. asked for crude loose at mills, and 26@27c. bid, according to freight rates. Prime yellow refined 34@34½c. asked. The sales comprise 2,000 bbls. prime yellow for November at 34c.; 2,000 bbls. do, at 34½c.; 900 bbls. do, January, at 34@34½c.; 2,000 bbls. do, for December, at 34c.; 1,000 bbls. do, at 34½c.; 600 bbls. off yellow for November, at 33½c.; 500 bbls. do, at 32½c. f. o. b. New Orleans; 30 tanks Atlantic crude for November, at 27½c.; 2,500 bbls. prime yellow for December-January, at 34½c.; 600 bbls white oil do, at 37½c.; 1,250 bbls. winter yellow do, at 37c.; 15 tanks soap stock, 1.10c. f. o. b. Texas, and 10 do, at 1.25c. f. o. b. Memphis.

EXPORTS OF COTTONSEED OIL FROM NEW YORK, BY COUNTRIES.

	For week ending Nov. 6, 1902.	Since Sept. 1, 1902.	Same time last year.
Africa, Algiers	350	1,485	400
Egypt	....	564	.....
South	....	128	219
Argentine Republic	....	140	130
Australia & New Z.	....	81	442
Austria	300	5,621	4,256
Belgium	....	417	275
Brazil	350	3,850	2,247
British Guiana	80	409	352
British West Indies	193	972	1,230
Central America	7	15	5
Chili	....	4	22
Cuba	....	35	270
Danish West Indies	0	37	24
Denmark	750	2,646	1,416
Dutch West Indies	.....	.....	4
England	110	4,811	3,490
France	1,201	22,039	13,695
French Guiana	....	68	44
French West Indies	90	1,270	2,070
Germany	510	3,766	2,296
Gibraltar	....	.....	200
Italy	1,375	5,210	3,365
Japan	....	1	.....
Malta	110	1,095	50
Mexico	2	20	26
Netherlands	325	2,385	8,527
Newfoundland	....	.....	100
Norway and Sweden	....	470	190
Nova Scotia	....	2	5
Peru	....	7	24
Porto Rico	....	38	1
Roumania	....	280	.....
Russia	....	.....	250
San Domingo	70	510	397
Scotland	....	560	714
Turkey	....	315	.....

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Procter & Gamble Co.

Refiners of All Grades of

COTTONSEED OIL

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Puritan Salad Oil

Aurora, Prime Summer Yellow
Boreas, Prime Winter Yellow
Sapho, Summer White "Miners"
Neptune, Off Winter Yellow
Venus, Prime Summer White
Jersey Butter Oil

Tank Cars Free to Purchasers

Cable address: Procter, Cincinnati, U.S.A.
Office: CINCINNATI, O.
Refinery: IVORYDALE, O.

U. S. Columbia.....	9	163	54
Uruguay	....	880	660
Venesuela	....	8	1
Total, bbls.....	5,859	60,304	47,366

EXPORTS OF COTTONSEED OIL FROM NEW ORLEANS, BY COUNTRIES.

	For week ending Nov. 6, 1902.	Since Sept. 1, 1902.	Same time last year.
Austria	2,200	3,650	.....
Belgium	200	1,283	.....
Cuba	50	150	.....
Denmark	....	600	2,000
England	....	2,200	500
France	4,748	6,398	9,779
Germany	....	1,090	967
Ireland	....	525	.....
Netherlands	....	5,750	9,100
Scotland	....	267	.....
Total, bbls.....	7,198	21,913	22,346

EXPORTS OF COTTONSEED OIL FROM BALTIMORE, BY COUNTRIES.

	For week ending Nov. 6, 1902.	Since Sept. 1, 1902.	Same time last year.
Belgium	....	495	.....
England	....	123	.....
Germany	100	367	400
Ireland	....	50	.....
Netherlands	....	2,775	960
Scotland	100	100	.....
Total, bbls.....	200	3,910	1,360

EXPORTS OF COTTONSEED OIL FROM NEWPORT NEWS, BY COUNTRIES.

	For week ending Nov. 6, 1902.	Since Sept. 1, 1902.	Same time last year.
Belgium	....	204	.....
England	....	1,030	.....
Germany	....	5,309	2,148
Netherlands	....	17,933	4,777
Total, bbls.....	....	24,476	6,925

EXPORTS OF COTTONSEED OIL FROM GALVESTON, BY COUNTRIES.

	For week ending Nov. 6, 1902.	Since Sept. 1, 1902.	Same time last year.
Austria	....	2,350	.....
Denmark	....	1,274	500
France	....	.....	10,099
Germany	....	1,450	.....
Mexico	....	.....	5,173
Netherlands	....	8,020	4,825
Total, bbls.....	....	13,040	20,597

TOTAL EXPORTS AT PRINCIPAL PORTS.

From—	For week ending Nov. 6, 1902.	Since Sept. 1, 1902.	Same time last year.
New York.....	5,859	60,304	47,366
New Orleans.....	7,198	21,913	22,346
Baltimore	200	3,910	1,360
Newport News.....	....	24,476	6,925
Galveston	....	13,040	20,597
Total, bbls.....	13,257	123,643	98,594

The following are the official returns of the exports of cottonseed oil, in gallons, during the months of September, 1902 and 1901, furnished by the Bureau of Statistics, Washington:—

	1902.	1901.
Arizona	.....	60
Baltimore	124,750	3,000
Boston and Charlestown	.....	2,035
Brazos de Santiago.....	1,883	.....
Cape Vincent	.....	117
Champlain	3,688	.....
Corpus Christi	23,300	30,306
Detroit	36,719	49,588
Galveston	113,600	.....
Huron	40,450	4,611
Mobile	.....	2,409
New Orleans	336,705	315,135
Newport News	396,344	26,520
New York	1,142,920	942,273
N. & S. Dakota.....	.....	100
Passamaquoddy	.....	2,700
Philadelphia	65,034	.....
Saluria	174,709	150,114
San Francisco	804	.....
Savannah	263,276	.....
Vermont	911	5,834
Totals, gallons 2,725,093		1,535,701

TOTAL MONTHLY STATEMENT.

	1899.	1900.	1901.	1902.
Jan.....	8,280,487	7,100,740	6,089,587	3,553,840
Feb.....	5,427,822	4,185,033	6,280,902	2,201,340
March...	4,916,440	4,133,688	5,251,955	2,272,824
April...	3,482,987	3,056,532	4,994,805	2,255,273
May....	2,408,458	3,012,760	3,991,528	2,775,577
June....	2,541,592	2,041,088	2,339,703	1,761,837
July....	2,577,454	1,289,595	1,852,602	1,876,842
Aug.....	3,106,770	3,154,303	1,843,434	1,626,299
Sept....	2,276,515	2,202,682	1,535,701	2,725,093
Oct.....	3,915,809	2,805,504	3,837,162	.....
Nov.....	3,026,035	4,788,607	4,371,917	.....
Dec.....	6,538,519	6,168,279	4,795,760	.....
Totals.	49,507,888	44,538,756	47,005,231	.....
Average	4,128,151	3,711,563	3,917,103	2,338,769

(Special Cablegram to The Reporter.)

Liverpool Cotton Oil Market.

Liverpool, Nov. 7, 1902.

Cotton oil, £21 10s.; cake, £5 17s. 6d.; meal, £5 17s. 6d.; seed, £6 per ton c. i. f. Liverpool. Oil is quietly steady. Cake and meal are inactive. Seed is recovering in tone.

(Special Cablegram to The Reporter.)

Trieste Cotton Oil Market.

Trieste, Nov. 7, 1902.

The market is quiet and unchanged. Prime summer yellow, immediate shipment, 70 francs; off yellow, 66 francs; butter oil, 73½ francs, November-December shipment; prime summer yellow, 57 francs; off yellow, 56 francs; butter oil, 60 francs per 100 kilos c. i. f. Trieste.

(Special Cablegram to The Reporter.)

Hamburg Cotton Oil Market.

Hamburg, Nov. 7, 1902.

Butter oil, 48 marks; off oil, 46½ marks per 100 kilos for prompt shipment. Futures—Butter oil, 47 marks; off oil, 45 marks per 100 kilos f. o. b. Hamburg. The market is

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LARD COMPOUND

Refineries located at—Savannah, Augusta and Atlanta, Ga., Charleston, S. C.; Charlotte, N C. Montgomery, Ala.; Houston. Tex.; New Orleans, La.; Memphis, Tenn.; and Little Rock, Ark.

quiet. Prime Texas meal for prompt shipment, 125 marks; cake, 124 marks; bolted, 129 marks per ton c. i. f. Hamburg. Futures—Meal, 123 marks; cake, 123 marks; bolted, 127 marks per ton c. i. f. Hamburg. The market is dull and inactive, with prices going slowly downward.

(Special Cablegram to The Reporter.)

Rotterdam Cotton Oil Market.

Rotterdam, Nov. 7, 1902.

The market is quiet. Butter oil, December-January shipment, 28½ florins; prime summer yellow, December-January shipment, 27 florins per 100 kilos c. i. f. Rotterdam.

(Special Cablegram to The Reporter.)

Antwerp Cotton Oil Market.

Antwerp, Nov. 7, 1902.

Off summer yellow, prompt shipment, 67 francs; for shipment during this or next month, 63½ francs; for shipment during the first four months of next year, 63½ francs per 100 kilos c. i. f. Antwerp. There is scarcely any demand.

(Special Cablegram to The Reporter.)

Antwerp Linseed Cake Market.

Antwerp, Nov. 7, 1902.

Prime Western linseed cake, November shipment, 16¼ francs; for December shipment, 16½ francs: for shipment next or third month, 16 francs; for shipment during the first four months of next year, 15¾ francs per 100 kilos c. i. f. Antwerp. The market is very quiet with scarcely any movement.

(Special Telegram to the Reporter.)

Texas Cotton Oil Market.

Dallas, Nov. 8, 1902.

Twenty-six and a half cents freely bid for crude oil, 27c. paid in limited quantities. Seed receipts light and weather unfavorable for maturing cotton.

(Special Telegram to the Reporter.)

Memphis Cotton Oil Market.

Memphis, Nov. 8, 1902.

Prime crude 27c Mississippi Valley, 27½ to 27¾c., Memphis. Market quiet.

(Special Telegram to the Reporter.)

Kansas City Cotton Oil Market.

Kansas City, Nov. 8, 1902.

Cotton oil market quiet and easy, 26½c. Texas and Territories, and 27c. Valley prime crude. The market for refined oil is comparatively steadier, 29½c. Texas paid for bleachable quality.

(Special Telegram to The Reporter.)

Texas Cotton Oil Market.

Houston, Tex., Nov. 8, 1902.

About 35 tanks of crude sold Monday and Tuesday at 27c. and a few scattered tanks since at the same price; trading mostly immediate and prompt shipment. Weather rainy and cloudy since Sunday without intermission. Practically no sales to-day. Crude still bid for at 27c.; yellow, of bleachable grade, offered at 29½c., with no buyers and no forward offerings. No business doing in meal; $22.25 to $22.50 shipside Galveston, short ton bid, prompt shipment.

(Special Correspondence to The Reporter.)

Texas Cotton Oil Market.

Dallas, Nov. 4, 1902.

This week opened with a good general rain of some forty-eight hours, extending pretty generally over Texas and the Territories; what effect this will have on the unmatured cotton crop depends on the weather to follow. Our oil market opened yesterday very quiet and no trading; to-day—like the weather—is a little brighter with some sales at 27c.; mills not free sellers, expecting a further advance. Cake and meal in some demand, especially for loose and cracked cake, prices ranging from $19.75 to $20, the latter for feeders. Linters some inquiry and sales at 2½c. to 3c.; mill run according to quality. Hulls $5; $6 for feeders. Seed light; receipts with price $16 to $17.

Cocoanut Oils, Etc.

CEYLON.—Only a small retail demand is reported for spot lots at 6¼@6½c., according to packing and seller. Previous to the advance abroad about 200 tons were sold for shipment at 5¾c. delivered in the West. At the close 6c. was asked for November-December arrivals, also for shipments for December forward.

COCHIN.—The market is quiet but steady, with jobbing sales reported at 7¾@8c., as to quantity and seller. December-January arrivals are held at 7½c. and January-March shipments at 6¾@7c., but this is above buyers' views.

CORN.—The market has further declined, with sales reported for prompt and forward for home consumption at 5.30c. and for export at about 5.25c. The demand, however, is light, as buyers are holding off for lower prices.

OLIVE.—There is a good jobbing demand for spot lots of yellow at 52@54c., and for arrival this year sales are reported at 51@52c. There is only a limited stock of choice green oil on the spot, for which 56@57c. is named, with sales thereat in a jobbing way. Foots of a choice quality are held firm at 6c., and ordinary grades for arrival at 5¾c. New crop is offered at 6c., but this fails to attract buyers.

PALM.—There have been several sales on the spot of red oil in a jobbing way at 5¾c. and to arrive at 5½c. Lagos is in limited stock and held at 6c. and for arrival 5¾c. Palm kernal is held at 6c. for November shipment.

PEANUT.—The market is easier under reports of a large crop and prices have given way with small sales to

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meet current wants at 5¾c. For a round lot this would be shaded.

MUSTARD.—The usual jobbing demand is reported, with sales in a limited way at 52@53c., as to quantity and seller.

RAPE.—The market having been cleared of recent arrivals is steady at 66@68c. for choice grades and at 63@64c. for refined and blown, as to quantity and seller.

Animal and Fish Oils.

COD.—There is not much doing in this oil at present, but holders do not attempt to force business, and the steady tone of the market is retained. For Newfoundland the greatest range as to quantity and seller is 36@37c. and on domestic 33@35c.

DEGRAS.—Business is on the hand-to-mouth order, and prices are in buyers' favor. English and German are obobtainable at 2¾@3c., as to quantity and French at 4¾@5c.

LARD OIL.—The upward moment in values of prime oil was checked early in the week, and some reaction occurred, owing to the cessation of consuming demand. Since then the market has been somewhat unsettled and the close was dull, with quotations at 87@89c. as to seller and quantity. Supplies continue light, but buyers are not inclined to take hold at these extreme prices. For the off grades there is a moderate jobbing demand at steady prices; but the situation presents nothing of special interest.

MENHADEN.—The situation in crude remains practically the same as for several weeks past. There is more or less demand from buyers who have wants still uncovered, but the paucity of supplies prevents business. The demand for the pressed and bleached oils is of average volume for the season, and prices rest on a firm basis.

NEATSFOOT.—Offerings of white cold test oil continue on a very small scale, and as the demand is growing, the tone of the market is very firm. Prime and dark grades are quiet, with prices somewhat nominal.

RED.—There is not much demand for saponified, while elaine is almost entirely neglected. Prices, however, are firm, the first named being held at 6¼@6½c. as to quantity, and the latter at 48@49c.

WHALE AND SPERM.—There was a further sale of 230 barrels of crude sperm oil in New Bedford, for manufacture, on private terms. The previously reported sale of 1,400 barrels is understood to have been at 62c. or 63c. instead of 60c., as stated in our last. No business in crude whale oil is reported. For the manufactured grades a fair jobbing demand exists and is supplied at prices within the range of our quotations. Stocks of crude in New Bedford at last advices consisted of 2,250 barrels of sperm and 2,470 barrels of whale oil.

TALLOW OIL.—The demand for acidless has been only fair, and buyers have shown no disposition to take more than enough for present use. The market, however, remains firm at the previous quotations. Prime and low grades are dull and unchanged.

Mineral Oils.

Owing to the recent considerable advance in the price of crude petroleum the market for all mineral oils is decidedly firm, and an early advance in prices is expected. Trade is fairly active in all descriptions, though largely of a jobbing character.

Oil Cake, Meal, Etc.

There is almost no demand either for export or for home consumption outside of a few shorts, who have been covering their November at $26.00@26.25. Futures for December-March are quoted at $25.00, with no transactions reported.

Wax, Lard, Tallow, Etc.

PARAFFINE WAX.—The home trade continues active and export business good, though shipments were on a smaller scale this week. The quantity exported since our last was but 1,331,065 lbs., compared with 4,107,423 lbs. last week and 3,188,718 lbs. the week prior to that. The steady tone of the market is retained and prices are unchanged, the principal producers quoting as follows: Crude, 117 deg. melting point, 5c.; 124-126 deg. m. p. (yellow), 4¾c.; refined, 120 deg. m. p., 5½c.; 125 deg. m. p., 6½c.; 130 deg. m. p., 7½c.; 135 deg. m. p., 9c., and 140 deg. m. p., 13@13½c.

TALLOW.—The market is easy with sales of city at 6¼c. for hhds. and 6½@6⅝c. for tcs. Prime country is selling at 6¾@7c., with no charge for packages.

GREASES.—There is more demand and sales have been made of several lots at 5¾c. for yellow, 5¼@5½c. for brown and 6c. for light bone.

STEARINE OLEO.—The market has been quiet at 15c., with reports that small sales had been made in the West at 14¾c.

The Price of Lard in Chicago.

Nov.	Nov.	Jan.	May.
1	10.45 @10.62½	9.12½@9.25	8.40 @8.55
3	10.47½@10.50	9.12½@9.20	8.37½@8.47½
4	—@—	—@—	—@—
5	10.52½@10.75	9.20 @9.37½	8.47½@8.60
6	10.90 @10.97½	9.40 @9.50	8.57½@8.70
7	10.87½@10.95	9.37½@9.45	8.50 @8.60

Exports of Flaxseed from New York.

BY COUNTRIES IN BUSHELS.

	For past week.	Since Aug. 1, 1902.	Same time 1901.
Belgium	94,711	359,183	62,660
Denmark	....	.....	8,396
England	64,981	247,107	7,999
France	87,933	113,141	8,372
Germany	50,297	156,161	.....
Italy	....	17,603	.....
Netherlands	41,882	354,141	151,648
Scotland	....	.....	.....
Totals	339,804	1,247,336	239,075

Exports of Flaxseed from Boston.

BY COUNTRIES IN BUSHELS.

	For past week.	Since Aug. 1, 1902.	Same time 1901.
Belgium	....	.....	.....
England	....	.....	45,543
Netherlands	....	112,700	108,756
Scotland	....	.....	.....
Totals	....	112,700	154,299

Exports of Flaxseed from Baltimore.

BY COUNTRIES IN BUSHELS.

	For past week.	Since Aug. 1, 1902.	Same time 1901.
England	....	.....	.....
Ireland	....	.....	.....
Netherlands	....	41,850	76,490
Totals	....	41,850	76,490

Parties desiring to be brought in contact with concerns who offer bargains in machinery are respectfully referred to page 27 of this issue.

If you desire to be brought in contact with the makers of machinery which enters into the manufacture of chemicals, drugs, paints, dyestuffs, fertilizers, naval stores, varnish, white lead, cotton oil, linseed oil, lubricating oil, etc., we would respectfully refer you to the Machinery Department of this publication, which you will find on page 23. Any special information that may be desired will be gladly furnished upon application, for we are in a position to place prospective purchasers in direct communication with the manufacturers of machinery of all kinds.

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NAVAL STORES.

NOTE.—Our prices are for large lots except when otherwise specified, and buyers of small quantities must expect to pay an advance on these figures. Complete prices current will be found on page 34.

Saturday Evening, Nov. 8, 1902.

SPIRITS OF TURPENTINE.—At the beginning of the week the market continued its upward course and reached 55½c for machine and 55c for Southern barrels, but buyers did not respond and there was very little business on the way up. Southern advices came somewhat weaker on Friday and the market here gave way to 55c for machine and 54½c for Southern barrels, and closed the week at those figures, the tone being rather easy and business slack.

ROSIN.—Trade has run along steadily, consumers buying in accordance with current requirements and prices have rested on a firm basis. There have, however, been no remarkable developments in the situation here or in the South.

TAR AND PITCH.—For tar the demand is slow and prices have eased off somewhat, oil barrels being quoted at $4.25@4.35 and regulars at $2.20@2.25. Pitch also is quiet and lower at $1.60 @1.70 as to quantity.

Receipts and deliveries of naval stores for week ending November 7, 1902:—

	Rosin.	Spirits of Turpentine.	Tar.
Stock in yard Oct. 31, 1902	26,370	1,564	1,024
Receipts	4,713	1,550	394
Deliveries	2,179	691	211
Stock in yard Nov. 7, 1902	28,904	2,423	1,207

STOCKS ON HAND.

	Spirits. Bbls.	Rosin. Bbls.	Tar. Bbls.
New York, Nov. 7	2,423	28,904	1,207
Wilmington, Nov. 6	542	24,795	1,377
Savannah, Nov. 2	23,305	106,005	....

Savannah, Ga., Nov. 7, 1902.

Turpentine quiet, 52c.; receipts, 1,079; sales, 205; exports, none. Rosin firm; receipts, 2,554; sales, 1,746; exports, 1,130. Quote:—A, B, C, $1.35; D, $1.40; E, $1.45; F, $1.50; G, $1.60; H, $1.80; I, $2.05; K, $2.55; M, $3.00; N, $3.50; W. G., $3.75; W. W., $4.15.

Wilmington, N. C., Nov. 7, 1902.

Spirits turpentine, nothing doing; receipts, 20. Rosin firm, $1.25@1.30; receipts, $1.23. Crude turpentine firm, $1.75 and $3.00; receipts, 39. Tar firm, $1.40; receipts, 57.

Charleston, S. C., Nov. 7, 1902.

Turpentine firm, 50½c.; sales, 50. Rosin firm, unchanged; sales, 200.

New Orleans, La., Nov. 7, 1902.

Receipts of rosin, 285 bbls.; turpentine, 113. Exports of rosin to Costa Rica, 10.

Liverpool, Nov. 7, 1902.

Turpentine—Spirits firm, 40s. Rosin—Common steady at 4s. 3d.

London, Nov. 7, 1902.

Turpentine—Spirits, 38s. 4½d. Rosin—American strained, 4s. 9d.; fine, 9s. 6d.

If you desire to be brought in contact with the makers of machinery which enters into the manufacture of chemicals, drugs, paints, dyestuffs, fertilizers, naval stores, varnish, white lead, cotton oil, linseed oil, lubricating oil, etc., we would respectfully refer you to the Machinery Department of this publication, which you will find on page 23. Any special information that may be desired will be gladly furnished upon application, for we are in a position to place prospective purchasers in direct communication with the manufacturers of machinery of all kinds.

TRAY BLEACHED WHITE ROSIN

(PATENTED)

We are now shipping the crop 1902. This stock is as pure as White Varnish Gums.

As the supply is limited manufacturers had best lay in stock now. For samples and prices address

TRAY ROSIN CO.

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Moritz & Pincoffs,

HAMBURG, GERMANY,

AGENTS and COMMISSION MERCHANTS.

Cotton-Seed Products, Oils, Greases, Oil Cake. Oil Seed, etc.

Highest References. Correspondence Solicited.

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WANTS.

SPECIALS OR NOTICES in this column are at the rate of Two Dollars for each insertion for eight lines or less. All over eight lines Twenty-five cents per line of about six words. The full amount in cash must accompany all orders.

WANTED.

By responsible and experienced business man, thoroughly conversant with the oil, paint, varnish, drug and chemical trade, to represent a first-class house in Southern California and territory tributary thereto, with headquarters in Los Angeles; highest bank and mercantile references. Address RETIRED MANUFACTURER, P. O. Box 594, Rochester, N. Y.

POSITION WANTED.

A chemical engineer, graduate, with many years' experience in the manufacture of heavy chemicals, sulphuric, nitric, muriatic and mixed acids, alum, Glauber's salt, salt-cake, ammonia, and many other chemicals, constructing and erecting plants: also large experience in analytical and research work, wants suitable position. Address R. S., care of this paper.

PAINT SALESMAN WANTED.

By an old established house to sell paints, oils, lead and varnish. One with experience and acquaintance with the trade in the Middle and Southern states will find a good opening. Address by letter, with reference, for ten days, C. P. MASTERSON, No. 1 Nassau St., New York.

PAINT SALESMEN WANTED.

A large manufacturing company, carrying a full line of paints, oil, varnishes and painters' supplies generally, desires to secure the services of two wide-awake experienced paint salesmen for New York State and near by territory. Address, stating salary desired and full particulars, which will be regarded strictly confidential, "EXPERIENCE," care of this paper.

WANTED.

Salesman with experience of paint trade to represent in Pennsylvania firm long established. Address A. Z., care of this paper.

WANTED.

Connections with only first class chemical works in the U. S. for the purpose of manufacturing Acetic Acid, Acetine, Alsatian Gums, Aniline Colors, (Specialties), Boracic Acid, Borax, Degras, Dressing Articles, Ethyltartaric Acid, Formaldehyde, Lac Dyes for paper factories and calico printings, Lactic Acid, Lithopone, Paranitraniline, Prussiate of potash, Tannic Acids, according to the methods employed in making these articles in Europe, Apply S. H., care of this paper.

POSITION WANTED.

Competent man, 20 years' experience as buyer, manager and salesman in paint, color and varnish line, would make contract for position to commence Jan. 1. First-class references furnished. Address "BUYER," care of this paper.

POSITION WANTED.

An expert in the manufacture of wood finishing materials, manipulation of white leads, ready-mixed paints (all kinds), colors in oil, enamels, special oils, dryers, other valuable specialties, and, in fact, nearly everything connected with the trade, would like to correspond with a first-class firm requiring the services of such a party. Correspondence strictly confidential. Apply "BOSTON," care of this paper.

POSITION WANTED.

Traveling salesman, chemical line, open for position January 1, 1903. Best of reference and a good acquaintance with the jobbing and manufacturing trade throughout Ohio, Kentucky, Tennessee, Indiana, Illinois, Michigan and New York. Address "E. H.," care of this paper.

NEW YORK OFFICE OF
THE AMERICAN COTTON OIL CO.
27 Beaver Street, N. Y. City.
November 6, 1902.

The Annual Meeting of the Stockholders of The American Cotton Oil Company will be held at the principal office of the Company, the Refinery, near Guttenburg, Hudson County, New Jersey, on Thursday, the 4th day of December, 1902, at 12 o'clock noon, for the purpose of electing Directors, and for the transaction of such other business as may properly come before the meeting.

The Stock Transfer Books of the Company will be closed at 3 P. M., November 13, 1902, and will remain closed until 10 A. M., December 5, 1902.

By order of the Board of Directors.
JUSTUS E. RALPH, Secretary.

The Board of Directors of THE AMERICAN COTTON OIL COMPANY has this day declared a semi-annual Dividend of Three Per Cent. upon the Preferred Stock, payable December 1, 1902, and a Dividend of Six Per Cent. upon the Common Stock of the Company, payable in two instalments as follows: Four Per Cent. on December 1, 1902, and Two Per Cent. on June 1, 1903, at the Banking House of Winslow, Lanier & Company, 17 Nassau Street, New York City.

The Transfer Books of the Company, for Dividends payable December 1, 1902, will be closed at 3 P. M., November 13, 1902, and will remain closed until 10 A. M., December 5, 1902.

The Common Stock Transfer Books, for that portion of Dividend upon the Common Stock payable June 1, 1903, will be closed at 3 P. M., May 15, 1903, and will remain closed until 10 A. M., June 2, 1903.

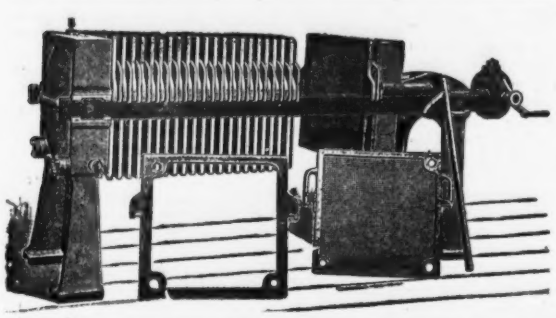
JUSTUS E. RALPH, Secretary.
Dated November 6, 1902.

Machinery Department.

The advertisements which appear in this department are those of Manufacturers, and they all will send catalogue and full information upon application.

It is requested that all inquirers mention the fact that the name was taken from the MACHINERY DEPARTMENT of this publication.

If any of our readers are contemplating the purchase of machinery we will be pleased to place them in direct communication with the manufacturers.



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WE MAKE A SPECIALTY OF PRESSES FOR FILTERING

All kinds of Oils, Colors, Varnishes, White Lead, Clay, Whiting, Starch, Sugar Chemicals, etc. Also Steam and Power Filter Press Pumps, Filter Cloth and Filter Paper.

JOHN JOHNSON & CO.

Works: Garwood, N. J. 95-97 Liberty St., NEW YORK CITY.

THE SPERRY FILTER PRESS

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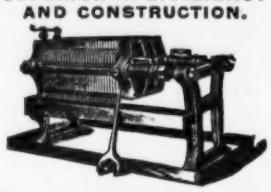

The Patent Plate saves cloths, produces a dryer cake, and is altogether better than the old form. WRITE FOR INFORMATION.

D. R. SPERRY & CO.

MANUFACTURERS OF

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FILTER PRESSES

Send for our Catalogue No. 7.

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For mechanical treatment of all materials

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Direct Heat and Steam Dryers for Clay, Coal, Iron Ore, Paints, Kaolin and similar materials.

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Wood Water Pipe

FOR CONVEYING CHEMICALS.

ACID PROOF

Patent Water-Proof Steam Pipe Covering

FOR UNDER GROUND STEAM PIPES

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No. 110 E. Chemung Place, Elmira, N. Y.

A—Tin Lining. B—Asbestos. C—Wood. D—Corrugated Paper. E—Wood. F—Asphaltum Coating.

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8 Sizes Hand Mills

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PONY, LIQUID AND SEMI-PASTE MIXERS,

Strong, Durable, and Nicely Finished.

Gang Mills 2 to 6 on a bench

Ink Mills with Wide Grinding Surface.

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"The Kohinoor in California's Crown."

MOUNT SHASTA

There is no more beautiful sight of its kind than Mount Shasta, covered with snow and glistening in the sun. Thousands have traveled across the continent to see it, and felt well repaid for their time. The way to reach it is by the

NEW YORK CENTRAL LINES

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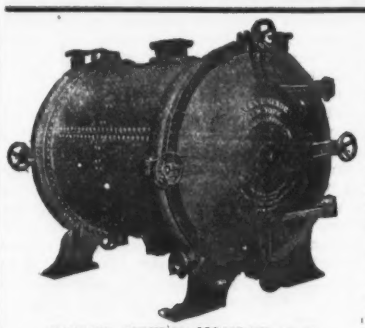
For details of rates and trains, see a ticket agent of the New York Central.

A copy of "America's Winter Resorts," will be sent free, on receipt of a two-cent stamp by George H. Daniels, General Passenger Agent, New York Central & Hudson River Railroad, Grand Central Station, New York.



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Avoid oxidation, burning and melting of the material.

Have a large drying capacity, occupy a small space and need but little steam.

Dry materials in a few hours that otherwise require many days or weeks.

Valuable solvents, ether, alcohol, etc., can be reclaimed and used again.

AMERICAN VACUUM DRYING MACHINE CO

New York Office, 120 Liberty St.

Laboratory Vacuum Drying Chambers

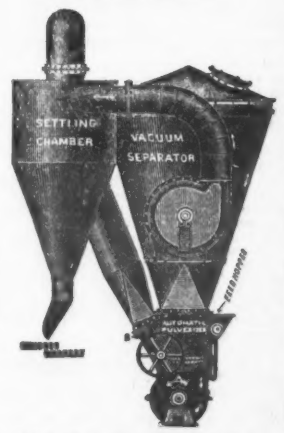
Suitable also for practical drying tests previous to ordering large machines.

For Sale at Messrs. EIMER & AMEND, 3d Ave. and 18th St., New York City.

WORKS, NEW HAMBURGH, N. Y.

THE RAYMOND IMPROVED PATENT AUTOMATIC PULVERIZER AND VACUUM SEPARATOR

Highest Award at the World's Columbian Exposition.



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Dustless in operation and easily operated.

Raymond Bros. Impact Pulverizer Co

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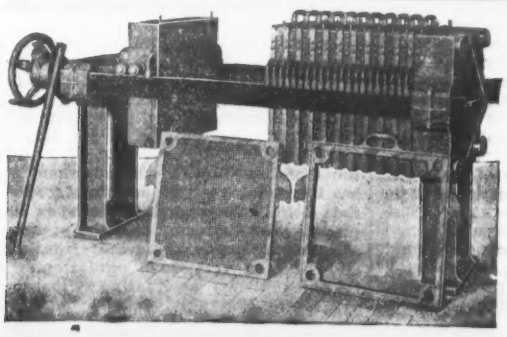

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FOR FILTERING

Cottonseed Oil, Linseed Oil, Varnish, Colors, White Lead, Whiting, Clay, Starch, Glucose, Sugar, Lard Oil, Tallow, Chemicals, Etc.

Special Bronze Presses for filtering acid liquors. Small Experimental Filter Presses for laboratory use.

Filter Press Pumps, Filter Cloth and Filter Paper.

T. SHRIVER & CO.

341 East 56th Street, NEW YORK CITY

(Special Correspondence to The Reporter.)

Drawback on Window Glass.

Washington, Nov. 7, 1902.

The Treasury Department has prepared regulations for the allowance of drawback of duty paid on imported window glass used in the manufacture of glazed window sash and doors for export as follows:—

"On the exportation of glazed window sash and doors in the manufacture of which no other than imported window glass was used a drawback will be allowed equal in amount to the duty paid on such glass less the legal deduction of 1 per cent.

"The entry under which the merchandise is to be inspected and laden must shows the marks and numbers of the shipping packages and the contents of each package separately, describing the same as they are described in the export invoice. The number of sash in each package and the number, size and weight of lights in each sash, on which the tariff rates are based, must be shown.

"The drawback entry must show the number of sash and glazed doors of each kind or description exported and the number, size and weight of lights contained therein, respectively. The said entry must further show in addition to the usual averments that the exported merchandise was manufactured of materials and in the manner set forth in the manufacturer's sworn statement. The quantity, size and description of glass contained in the export shipment must be verified by the lading officer as a basis of liquidation.

"When ordered by the collector, a sworn sample of each description of glass used in the manufacture may be furnished with the preliminary entry for comparison with the glass appearing in the shipment and such expert examination in connection with the description of the same in the import invoice as may be considered necessary shall be made."

(Special Correspondence to The Reporter.)

Drawback on Medicinal Plasters

Washington, Nov. 7, 1902.

The Treasury Department has prepared a series of regulations for the allowance of drawback on the exportation of isinglass medicinal plaster manufactured from imported silk and domestic isinglass and medicating agents. These regulations, which are issued on the application of Messrs. Johnson & Johnson, of New Brunswick, N. J., are as follows:—

"On the exportation of silk isinglass plaster, in the manufacture of which no other than imported silk has been used, combined with certain domestic materials, a drawback will be allowed equal in amount to the duty paid on the imported silk so used, less the legal deduction of 1 per cent.

"The preliminary entry must show the marks and numbers of the shipping cases, the number of unit packages or paper cartons contained in each, and the total number of rolls of isinglass plaster of 252 square inches each contained in each shipping case and in the entire shipment.

"The drawback entry must show the total number of rolls or pieces of isinglass plaster of the size stated, exported, the aggregated quantity exported in square yards, and the number of square yards of silk in condition as imported appearing therein. The said entry must further show, in addition to the usual averments, that the exported merchandise was manufactured of materials and packed for shipment in the manner set forth in the manufacturer's sworn statement.

"In liquidation, the quantity of silk in condition as imported, which may be taken as the basis for allowance of drawback, may equal the quantity consumed, as declared in the drawback entry, but in no case shall it exceed 2½ square yards, per one dozen pieces, each containing 252 square inches. Samples may be taken or sworn samples furnished for required determinations."

(Special Correspondence to The Reporter.)

Drawback on Refined Glycerine.

Washington, Nov. 7, 1902.

Drawback regulations have been prepared by the Treasury Department for the allowance of rebate of duty paid on imported refined glycerine and alcohol used in the manufacture of certain preparations of cod liver oil. These regulations, which have been issued upon the application of Henry K. Wampole & Company, of Philadelphia, Pa., are as follows:—

"On the exportation of the preparation of cod liver oil, manufactured in part from imported alcohol and imported refined glycerine, a drawback will be allowed equal in amount to the duty paid on the imported materials used, less the legal deduction of 1 per cent.

"The entry under which the merchandise is to be inspected and laden must show the marks and numbers of the shipping cases, together with the number and size of the bottles therein and the quantity of the cod liver in each case. The drawback entry must show the quantity of the cod liver oil exported and the quantities and percentages of alcohol and refined glycerine contained therein, and the entry must further show in addition to the usual averments that the cod liver oil was made in accordance with the statement set forth in the manufacturer's sworn application.

"In liquidation the quantities of alcohol and refined glycerine which may be taken as the basis for allowance of drawback may be those declared in the drawback entry after official verification of declared exported quantities, but in no case shall the allowance for cod liver oil be based on a quantity of the exported article in excess of 69 fluid ounces for each one dozen bottles called 6 oz. bottles, but containing only 5¾ oz. per bottle; 174 fluid ounces for each dozen bottles called 16 oz. bottles, but containing 14½ oz. per bottle; and 960 fluid ounces for each dozen bottles called 80 oz. bottles, and in no case shall the allowance for alcohol be in excess of 21 per cent., nor the refined glycerine in excess of 25 per cent. in the hereinbefore mentioned quantities.

"Samples may be taken or sworn samples furnished as ordered by the collector to be submitted to the appraiser for commercial analysis, and exported quantities shall be ascertained by an export officer.

Quantitative Separation of Maltose and Lactose.

BY CHARLES I. BOYDEN.

The writer, in the course of a study on the composition of sundry infant and invalid foods now on the market, undertaken to fulfill a thesis requirement for graduation from the agricultural department of the University of Vermont, found it necessary quantitatively to separate maltose and lactose. He was unable to find, either in the literature or through correspondence with several chemists well informed in food analysis, any satisfactory method to this end. Such a separation may be accomplished, however, by the use of a certain variety of yeast, Saccharomyces anomolus, which removes maltose completely without acting on the lactose.

It is well understood that the two bisaccharides, maltose and lactose, need to be hydrolyzed before they may be fermented, and that the former yields two molecules of glucose and the latter one of glucose and one of galactose as a result of hydrolysis. Glucose is then easily fermented. Yeasts usually contain hydrolytic enzymes, which are capable of changing maltose to a greater or less extent, but which are inactive with lactose.

In the course of the work carried out by the writer nine different species of yeast were used. Eight of the yeasts were obtained from Kral, and one was a pure culture from ordinary Fleischmann's bread yeast. The yeasts from Kral's laboratory were: Saccharomyces anomolus Hansen, S. cerevisiae I Hansen, S. cerevisiae Carlsberg unterhefe I Hansen, S. ellipsoideus I Hansen, S. farinosus Lindner, S. Kephir Beijerinck, S. Marxianus Hansen, S. Pastorianus I Hansen. Pure cultures if each were grown in agar, from which they were transferred to Pasteur's fluid (Strassburger and Hillhouse's formula). Samples of commercial maltose (66.36 per cent. maltose, remainder mostly dextrin) and lactose of known composition were used separately, as well as in mixtures of definite strengths.

From 25 to 100 cc. of a solution of these sugars, usually 0.50 per cent. strong and containing 1 per cent. of Pasteur's mixture (Strassburger and Hillhouse), were heated at 100 deg. C. in a steam sterilizer for thirty minutes on three successive days. The sterilized fluid was then innoculated with the particular yeast under trial and incubated at 30 deg. C. for from two to thirty days; then again sterilized at 100 deg. C., cooled, made up to volume, filtered, and the sugar present determined by Allihn's method. The usual precautions to prevent contamination with organisms other than the yeast under trial were observed throughout the operation from inoculation to filtration. The temperature of 30 deg. C. was chosen, inasmuch as bread yeast appeared to act most vigorously at this temperature. The percentages of maltose removed and of lactose remaining were readily calculated from the copper reduced prior to, and that reduced subsequent to, the removal of maltose. Obviously, when working with known quantities, the completeness or the incompleteness of the removal of the maltose may be readily measured in this manner.

From about 10 per cent. to nearly all of the maltose remained unacted upon by eight of the yeasts. One of these yeasts, however, after a few preliminary trials completely and uniformly hydrolyzed and fermented the maltose.

S. anomolus was much the most active yeast used. It produced a heavy white growth in tube cultures in a few days. After two days' inoculation at least three-fourths of the maltose had disappeared and the proportion of maltose modified uniformly decreased up to sixteen days, after which there was no apparent change. It was found necessary to filter through a bacterial filter in order to remove the yeast cells and to prevent a precipitation of the flocculent matter by the Allihn solution, which was equivalent to a weight of from 1 to 2 per cent. of copper. The following table shows the result of some of the work with this yeast. The figures clearly show the relation of filtration, of the time element and of the use of the Pasteur's mixture to complete success. (Maltose taken, 1 gram):—

Pasteur's mixture. Grams.	Volume. Solution of solution.	Inoculated. cc.	Days acted on.	CuO from 25 cc. solution.	Maltose remaining. Per cent.
2	200	50	2	0.0138	7.47*
2	200	50	4	0.0044	2.38*
2	200	50	13	0.0030	1.63*
2	200	50	16	0.0025	1.35*
2	200	50	16	0.0000	None†
None	200	50	11	0.0198	10.68*
None	200	50	34	0.0089	4.82†
0.5	200	50	31	0.0040	2.16†
1	200	50	14	0.0063	3.42†
1	200	50	38	0.0000	None†

*Not filtered with bacterial filter.
†Filtered with bacterial filter.

It may be remarked that when this yeast was grown for from four to twenty-four days in a solution of lactose, from 98 to 100.96 per cent. lactose was recovered, showing that this sugar was unaltered by the yeast. It may also be remarked that the fermentation method, using S. anomolus, has been tried upon several of the proprietary foods upon the market; that through the courtesy of the chemist of one of the companies manufacturing this class of gods the writer has been allowed to compare analytical results with manufacturer's formulas as regards percentages of maltose and lactose; and that a reasonably close agreement has been found.

It is interesting to note that in those solutions in which the other yeasts failed—as they always did—completely to transform all the maltose, reinoculation with S. anomolus readily hydrolyzed and removed the remaining maltose, while in no case did it appear in any way to affect their lactose content.

Vigorous growth is needed to hydrolyze the last traces of maltose. To produce this vigorous growth it is necessary to add some of the mineral elements found in the ash of yeast. Pasteur's mixture (Strassburger and Hillhouse) furnishes the necessary elements.

The method in its present form may be briefly outlined as follows:—The solution containing maltose and lactose having been made approximately 0.5 per cent., and containing 1 per cent. of Pasteur's mixture, 50 cc. are heated for three succesive days in a steam sterilizer, under the usual precautions, to 100 deg. C. for thirty minutes. The fluid thus sterilized is innoculated liberally with a pure culture of S. anomolus and incubated at about 30 deg. for from two to three weeks, the culture having been grown in agar and transferred to Pasteur's fluid prior to its use. After the incubation the fluid is filtered through a bacterial filter and the copper determined in the usual manner by Allihn's method. The difference between the copper thus determined and that present prior to inoculation may be calculated as maltose, the remainder as lactose.—Journal American Chemical Society.

Hydrogenation of Various Aromatic Carbides

(From the French of Paul Sabatier and J. B. Senderens. Paper presented to the Academie des Sciences.)

I. Benzine and Homologues.—As we have recently made known, reduced nickel readily enables a slightly elevated temperature to fix hydrogen directly on a great number of organic substances, and we have deduced from this fact a general method of preparation of cyclohexane and of the homologous carbides. In studying closely the conditions of this preparation, we have ascertained that, below 250 deg. C., hydrogenation takes place without any complication for the benzine and for all its methylated derivatives which we have tried, toluene, xylenes (ortho, meta and para), mesitylene, pseudocumene; the corresponding cyclohexane is obtained as the only product; it is of great purity, containing only a little of the primitive carbide, very easy to eliminate.

Commencing with the substitutes of benzine of the long branch, ethyl, propyl, metho-ethyl, it is always observed that besides the principal product, which is the corresponding cyclohexanic carbide, there is always a formation of a quantity, more or less important, of carbides resulting from the breaking up of the long chain. Thus ethyl-benzine furnishes ethyl-cyclohexane, a small amount of methyl-cyclohexane, with correlative formation of methane. Prophyl-benzine yields likewise a little methyl- and ethyl-cyclohexane. The perturbation is more noticeable when the branch possesses a secondary link, for example, when it is a metho-ethyl with para-cymene, the para-methyl-metho-ethyl-cyclohexane (boiling at 169 deg. to 170 deg. C.) forms only three-quarters of the product; the rest contains about three equal parts of para-dimethyl-cyclohexane (which boils at 120 deg.), and of para-methyl-ethyl-cyclohexane (boiling at 150 deg).

The ease of obtaining these different carbides very pure, formerly very difficult to prepare directly or to exactly isolate from petroleums of the Caucasus, has permitted us to exactly determine their physical characteristic.

The cyclohexane, C6H12, is a liquid, whose odor recalls that of chloroform and essence of roses. Cooled with ice, it easily solidifies in soft crystals, which melt at 6.5. It boils at 81 deg., under the pressure of 755 millimeters (thermometer in the vapor). Its density at 18.7 deg. C. is 0.7808.

We give below the boiling points and the densities at 0 deg., as compared with water at 4 deg., of the homologous carbides of the cyclohexane:—

	Corrected boiling point. °(C.)	d. °4
Methy-cyclohexane	100.1	0.7859
Ortho-dimethyl-cyclohexane	126.	0.8008
Meta-dimethyl-cyclohexane	121.	0.7874
Para-dimethyl-cyclohexane	120.	0.7866
Ethyl-cyclohexane	130.	0.8026
Trimethyl-cyclohexane 1, 3, 4	143-144	0.8052
Trimethyl-cyclohexane 1, 3, 5	137-139	0.7884
Para-methyl-ethyl-cyclohexane	150	0.8041
Propyl-cyclohexane	153-154	0.8091

The odor of the methyl-cyclohexane differs little from that of cyclohexane. That of the ortho-dimethyl is a little camphory. The para derivatives (dimethyl, methyl-ethyl methyl-metho-ethyl) all have a similar odor, which resembles that of fennel. That of the meta derivatives (dimethyl, trimethyl 1, 3, 5, and even trimethyl 1, 3, 4) is the least agreeable of all and recalls moldiness.

In comparing the densities above with those of the corresponding benzenical carbides, it is found that they are always least; the difference, which is greater for the cyclohexane, in which it is about 0.100, is the weaker, as the molecule is more complex, and, above all, as the formenic branches are longer.

II. Styrolene.—M. Berthelot proved long ago that styrolene or cinnamene should be considered as phenyl-ethylene. Reduced nickel, realizing with facility the hydrogenation of the ethylene, or of the aromatic core, it could be foreseen that it would produce total hydrogenation of the styrolene. We have ascertained that this is the case at about 160 deg. C. Total conversion into ethyl-cyclohexane, boiling at 130 deg. C. is obtained, whose partial decompositon gives place to a small quantity of methyl-cyclohexane, which boils at 100 deg. C.

On the contrary, we have found that reduced copper enables the hydrogen to fix on the ethylene above 180 deg. C., but that it is without appreciable action on the aromatic carbides. It may now be supposed that in the styrolene, in presence of copper at 180 deg. C., the ethylenic branch only would be hydrogenized. This is a fact. The complete conversion into pure ethyl-benzine, boiling at 135 deg. C., is obtained at the outset.

With reduced cobalt, whose activity is between that of copper and nickel, the hydrogenation leads to a mixture of ethyl-benzine and of the ethyl-cyclohexane.

III. Terpenes.—As M. Berthelot has held, the terpenes may be classed in two groups—the quadrivalent terpenes, which comprise limonene, sylvestrene, terpinene, etc., and the divalent terpenes, such as terebenthene or pinene, and camphene. The reactions of hydrogenation realized by the intermediation of nickel, at about 180 deg. C., have furnished us with a complete verification of this distinction.

Limonene fixes H4 very readily, yielding hydrocymene, which boils at 169 deg. to 179 deg. C. This last, as in its formation from cymene, is accompanied with a small quantity of the products of decomposition, para-dimethyl and para-methyl-ethyl-cyclohexane.

Sylvestrene and terpinene have given exactly the same product of hydrogenation as limonene.

Menthene, treated in the same conditions, fixes H2, yielding the same products.

On the contrary, pinene (terebenthene), with nickel at 180 deg. C., fixes only H2, and is changed into a unique product, unattackable by the nitro-sulphuric mixture; it is a liquid of camphory odor, boiling at 166 deg. C. (corr.); its density d04 is 0.862. It is the same as the carbide obtained by M. Berthelot by the action of iodhydric acid. Saturated, it behaves like pinene-chlorhydrate. But the presence of internal bonds somewhat fragile is shown by a very easy oxidation. It becomes brown gradually by contact with the air, and, cold, is oxidized

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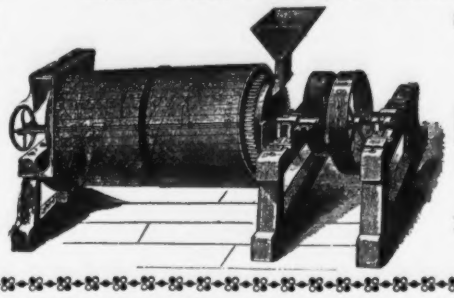

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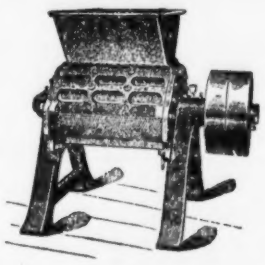

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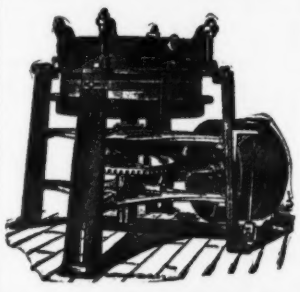

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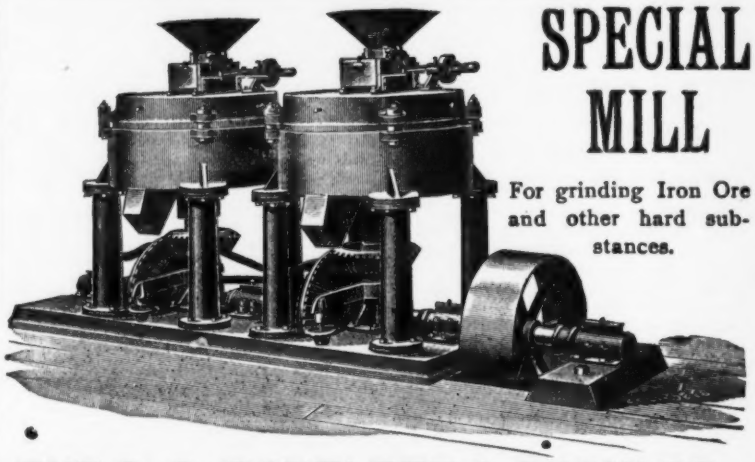

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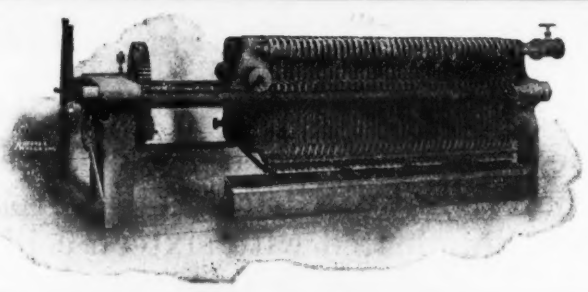

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quite quickly by contact with nitric acid.

The vapor of camphene submitted to hydrogenation with nickel acts like pinene; there is an exclusive fixation of H2 and formation of a carbide isomeric, but not identical with the preceding, and of more agreeable odor. It boils at 164 deg. to 165 deg. C. (corr.); its density d4 deg. is 0.849. It is not attacked, cold, by the sulphonitric mixture; but is oxidizes slowly by contact with nitric acid, and even with the air, gradually becoming brown. This is the camphene hydride discovered by M. Berthelot.

IV. Napthalene and Acenapthene.—The hydrogenation of napthalene is directly realized by nickel at 200 deg. and furnishes as a sole product a tetrahydride. It is a liquid with a naphthalenic odor, boiling at 205 deg. C. (corr.); its density, d4 deg., is 0.9825. It is identical with one of the hydrides of napthalene obtained by M. Berthelot by means of iodhydric acid and found in coal tar. It is very easy to oxidize and is violently attacked by the nitrosulphuric mixture. Directed with hydrogen on nickel, at about 200 deg. C., it is not modified.

Acenapthene acts in the same manner. Its vapors, drawn by hydrogen on reduced nickel, are changed into liquid tetrahydride, boiling at 254 deg. C. (corr.), and is without doubt identical with that which Bamberger and Lodter obtained by means of iodhydric acid.

Rosin Soap, by the Cold Process.

For a small manufacture the materials may be stirred together by hand, but for large quantities a mechanical stirrer is absolutely necessary. As materials serve:—palm kernel oil and cocoanut oil, with additional fats, such as tallow, bone fat, crude palm oil, etc., the amount of rosin varying from 10 to 100 per cent.; for filling are used:—Soluble glass, talcum, potash solution, salt water, sugar solution, etc. The temperature at which the fats are stirred together with the lye depends upon the fat ingredients, the more animal fats are in the composition and the larger the percentage of rosin, the higher must be the temperature at which they are stirred together. The filling is either crutched in immediately after the lye or only after spontaneous calefaction has set in. Small, flat, iron molds are the best adapted for framing, so that the soap can quickly solidify. Following are some recipes:—

	Kilos.
Tallow	70
Palm nut oil	30
Rosin	100
Caustic soda lye, 35 deg.	105
Soluble glass	20
Potash solution, 20 deg.	5

The fats are melted together with the rosin and at 133 deg. F. the lye is stirred in and after that the filling. By working in a little crude palm oil, the soap becomes more brilliant, which can also be obtained by dyeing with a little domestic soap-yellow.

A darker soap is obtained with the following ingredients:—

	Kilos.
Bone grease	30
Palm nut oil	30
Dark rosin	40
Caustic soda lye, 36 deg.	52
Soluble glass	30
Potash solution, 10 deg.	5

Mix at 145 deg. F.

The following composition yields a very pale product:—

	Kilos.
Palm nut oil	100
French rosin	10
Caustic soda lye, 38 deg.	56
Soluble glass	20
Potash solution, 20 deg.	10

If a very transparent, pale, rosin soap is desired, the following recipe is valuable:—

	Kilos.
Cocoanut oil	100
Bleached palm oil or tallow	30
Pale rosin	15
Caustic soda lye, 28 deg.	140
Sugar	5
Sugar (dissolved in water)	6
Potash solution, 30 deg.	15

The fats are melted together with the rosin and at 145 deg. F. the warmed lye is stirred in. Crutch the same through for some time, whereup cover the kettle for two hours until spontaneous calefaction has taken place. To the bright, clear soap the filling, which is also pre-warmed, is added, with stirring, and the framing attended to.

Better results are obtained with salt fillings, the following recipe furnishing a pale, cheap product:—

	Kilos.
Cocoanut oil	80
Pale bone grease or tallow	30
Rosin	10
Potash lye, 25 deg.	50
Soda lye, 30 deg.	68
Potash solution, 32 deg.	40
Salt water, 24 deg.	90

Melt the oil with the rosin and at 156 deg. F. first stir in the potash lye, then the soda lye, and finally the potash solution and the salt water, and when the whole is well mixed, frame.

Still cheaper is the following composition:—

	Kilos.
Cocoanut oil	100
Rosin	15
Caustic soda lye, 37 deg.	62
Potash solution, 25 deg.	60
Salt water, 20 deg.	60
Soluble glass	30

At 145 to 160 deg. F. the lye is stirred into the molten fat and rosin, and immediately after that the filling, whereupon the framing is conducted.

In conclusion we will give a recipe with talcum:—

	Kilos.
Palm nut oil	100
Talcum	10
Rosin	15
Caustic soda lye, 37 deg.	62
Potash solution, 30 deg.	65
Salt water, 20 deg.	50
Soluble glass	20

Sift the talcum into the melted oil and rosin and at 156 deg. F. stir in the lye and subsequently the filling.—Seifensieder Zeitung.

Economical Manufacture of Phosphorus.

(From the French of L. de Belfort de la Roche in the Revue de Chimie Industrielle.)

Phosphorus or phosphoric acid is usually derived from green bones, because the quantity of phosphorus found in them is greater than in dry bones. The process employed is simple; the bones are calcined in the air in order to destroy the organic matter, and a porous mass remains, constituting what is called calcined bones, which are pulverized to obtain bone powder, containing about 87 per cent. of tricalcic phosphorus.

As the phosphate of bone is neither soluble in water nor attackable by charcoal, it is treated with dilute sulphuric acid, which converts it into mono-calcic phosphate and calcium sulphate.

$$(PO4)2Ca3+2SO4H2=(PO4)2CaH4+2SO4Ca.$$

The mono-calcis phosphate is dissolved in water, and the insoluble calcium sulphate is precipitated. The liquor is decanted and concentrated to the consistency of a syrup and one-quarter of its weight of pulverized charcoal added. A paste is formed, which is calcined at the dark red to dehydrate and converts the mono-calcic phosphate into calcium metaphosphate.

The calcined paste is then introduced into retorts of fireproof clay arranged in pairs in the same furnace. The neck of each apparatus is inserted in a copper receiver containing water up to the level of the extremity of the neck of the retort. The temperature is slowly carried to white red; the vapor of phosphorus is condensed under water, whilst carbon oxide and other gases are disengaged through an appropriate orifice. Two different interpretations of this reaction have been given:—

$$(1)\ 4[(PO3)2Ca]+10C=10CO+2[P2O7Ca2]+4P$$
$$(2)\ 3[(PO3)2Ca]+10C=10CO+(PO4)2Ca3+4P$$

It is well to remark that the phosphorus thus obtained is quite impure, and that it must be submitted to refining, which requires much hand work.

Formerly the green bones were found in sufficient quantity, and at prices sufficiently low for all needs, but the increasing exigencies of industry and of agriculture have caused the price of the raw material to advance, so that it is not employed so generally.

At the same time, and as a consequence of one of those equilibriums which are so frequently remarked in nature, deposits of phosphatic lime have been discovered, especially in Algeria, whose importance was quickly comprehended, since they have been bought up by rich companies, which have not hesitated to undertake extensive operations for the purpose of securing a rational and consecutive exploitation. One criticism is generally merited: with rare exceptions, as, for instance, at Djebel-el-Louz, Djebel-el-Kebir and Zaitous (Department of Oran,) the Algerian phosphates contain too many impurities, and the percentage in phosphoric acid is not sufficient to allow of their being directly handled in trade in the crude state.

The result is that most of these deposits, especially those situated in the interior and far from the coast, remain unworked; it is, therefore, of interest to make known a process at once practical and economical for converting these natural phosphates into phosphorus, which is always in demand.

If we examine the way in which nature has proceeded, we remark that, with few exceptions, the metals never occur in the native state. Their ores are almost always found in the form of a combination of the metal with metalloids, as oxygen, chlorine, fluorine, sulphur, selenium, tellurium, phosphorus, arsenic, or with acidifiable metals, such as antimony, molybdenum, vanadium, chromium, tungsten and manganese. On account of the role which they play in these chemical associations, the generic name of mineralizero has been given to these bodies. Their affinity and power of combination must therefore be made use of to obtain the desired reaction. Thus, if phosphorus is to be isolated from the natural tricalcic phosphates, it is sufficient to employ hematite and pyrites.

Hematite (Fe2O3) is anhydrous ferric oxide, more or less pure, met with in masses, sometimes quite large, in almost all the Algerian mountains, and which may be procured at low price.

Pyrites (FeS2) is a bisulphic of iron, also common in Algeria, and easily distinguished on account of its large cubic crystals of bright metallic brilliancy, of characteristic brass-yellow color, and of sufficient hardness to strike fire with a steel. It also occurs in the amorphous state. These masses are almost always buried at a slight depth below the surface, so that great labor is not necessary in mining them.

With the aid of these two agents, may be drawn from the natural tricalcic phosphate nearly the whole of the phosphorus contained, and in a surer and more rapid manner than by the ordinary methods, which I have mentioned briefly for comparison. It is first necessary to convert the phosphates into metallic phosphides; for instance, into ferric phosphides, Fe5P2. The conversion of the natural phosphates into phosphide may be readily produced by treating in a blast furnace or any other furnace capable of supporting suitable pressure, a mixture of phosphate and iron ore. The reaction probably passes according to the equation:—

$$(PO4)2Ca3+2½Fe2O3=12½O+3CaO+Fe5P2.$$

If, for example, a mixture of a hundred parts of phosphate and a hundred parts of iron ore (hematite) are treated, water, carbonic anhydride and oxygen are eliminated in consequence of the oxygen set at liberty, which passes to the state of carbon oxide and other volatile matters. About 60 parts of pure phosphorus are procured.

When this phosphorus has been obtained, it is necessary to melt it in a suitable apparatus with ferric bisul-

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phide (iron pyrites); for example, in the proportions of the equation:—

$$\underbrace{Fe5P2}_{\text{Phosphide.}} + \underbrace{5FeS2}_{\text{Bisulphide.}} = \underbrace{10FeS}_{\text{Monosulphide.}} + \underbrace{2P}_{\text{Phosphorus.}}$$

it is seen that the ferric bisulphide acts as a reducing agent, causing the ferric phosphide to pass to the state of protosulphide, thus setting the phosphorus at liberty.

The ferric protosulphide is afterwards exposed to moist air and converted into ferrous sulphate =SO4Fe. 7H2O, which constitutes a very important sub-product. It is employed in the manufacture of fuming sulphuric acid and of colcothar. It is of frequent use in dyeing, being utilized as a mordant and as a reducer of indigo. It also serves as a disinfectant, and is used in the manufacture of Prussian blue and of ink.

The phosphorus is disengaged in the state of vapor and may be easily collected under water in a condenser. The residues are all liquid and may be easily taken off or evacuated.

As the matter treated (metallic phosphide) is not acid or susceptible of giving rise to abundant disengagements of gas proceeding from secondary reactions, it is therefore possible to employ crucibles, retorts, or other fusing recipients ,of considerable size, capable of receiving large charges.

The apparatus is not attacked and does not accumulate solid residues, which would destroy them in a short time. They may serve for a large number of operations. The heat is readily transmitted, and the reaction operated regularly and with more rapidity, because the whole mass is fluid. The operation, therefore, continues only two or three hours on the average.

While utilizing an inexpensive material, a phosphorus vastly purer than that now afforded in commerce is obtained and with more rapidity and in larger quantities; besides, the ferrous sulphate, constituting the larger part of the residue, may be easily sold for the various needs of industry.

Example—First Phase. The equation representing the conversion of tricalcic phosphate into metallic phosphide, for example, ferric phosphide is as follows—

$$\underbrace{(PO4)2Ca3}_{310} + \underbrace{2\tfrac{1}{2}Fe2O3}_{400} = \underbrace{12\tfrac{1}{2}O}_{200} + \underbrace{3CaO}_{168} + \underbrace{Fe5P2}_{342}$$

Suppose that a ton of ferric phosphide is to be produced, the quantity of calcic phosphate to be employed will be:—

$$(PO4)2Ca3 = \frac{310\times1000}{342} = 906.433 \text{ kil.}$$

We know that the natural tricalcic phosphates are never found chemically pure. Suppose we have a natural phosphate of 60 per cent., it will be necessary to correct the preceding equation as follows:—

$$(PO4)Ca3 = \frac{906.433\times1000}{60} = 1510.721 \text{ kil.}$$

The quantity of hematite to employ will be:—

$$2\tfrac{1}{2}Fe2O3 = \frac{400\times1000}{342} = 1169.910 \text{ kil.}$$

Second Phase.—This comprehends the reduction of the metallic phosphide by ferric bisulphide:—

$$\underbrace{Fe5P2}_{342} = \underbrace{5FeS2}_{600} = \underbrace{10FeS}_{880} + \underbrace{2P}_{62}$$

To produce a ton of phosphorus there will be necessary:—

$$Fe5P2 = \frac{342\times1000}{62} = 5516.130 \text{ kil.}$$

$$5FeS2 = \frac{600\times1000}{62} = 9677.420 \text{ kil.}$$

Ferric protosulphide will be obtained as a sub-product:—

$$FeS = \frac{800\times1000}{62} = 14193.548 \text{ kil.}$$

but this protosulphide exposed to moist air, will be changed into ferrous sulphate (green vitriol) with absorption of seven molecules of water. FeS=88 will become SO4Fe+7H2O, or H14FeSO11=278. The weight of ferric sulphate finally obtained will therefore be

$$H14FeSO11 = \frac{278\times14193.548}{88} = 44838.712 \text{ kil.}$$

As we have seen, this ferrous sulphate is a product much in demand for different branches of industry.

According to the preceding calculations, to obtain a ton of phosphorus and forty-four tons of ferrous sulphate it will be necessary to employ the following quantities of raw materials:—

	Kilos.
Tricalcic phosphate of 60 per cent...	8333.233
Hematite	6453.375
Iron pyrites	9677.420
Total in weight.....	24464.028

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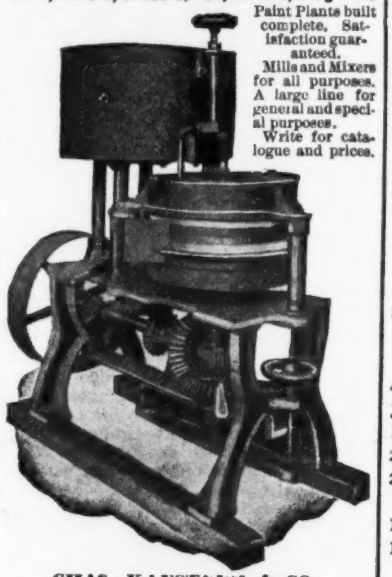

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2 15½x15 Armington & Sims automatic.
2 13x14 Watertown automatic.
2 14x16 Buckeye.
1 13x15 Buckeye automatic.
2 13x12 Erie Ball.
1 9x12 Ball automatic.
1 16 and 27x16 Westinghouse compound.
1 18 and 30x16 Westinghouse compound.
1 15 and 23x17 Tandem McIntosh.
2 13½ and 23x18 Tandem Compound, Williams.

Boilers.

4 250 H. P. B. & W.
3 175 H. P. B. & W.
1 160 H. P. B. & W.
2 120 H. P. B. & W.
2 175 H. P. Sterling Boilers, 150 lbs.
1 72"x17' Boiler.
1 Battery 4-72"x16' Boilers.

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FOR SALE.

Corliss Engines.

28x60 R. H. Geo. Corliss.

Automatic Engines.

12 and 21x24 Porter Allen Cross Compound.
14½x14 Ideal. 12x12 A. & S.
8x10 Russell.

Slide Valve Engines.

16x24. 12x20 10x16. 8x10.

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Horizontal, Portable and Vertical.

Single & Duplex Pumps, all Sizes.

Pipe, Shafting, Pulleys, Fittings, Hangers, etc.

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Three hydraulic presses.
Manufacturers Paraffine Co.,
Chester, Pa.,

OIL BURNING LOCOMOTIVES.

We have in stock, ready for immediate delivery, the following:

Oil-Burning Locomotives.

4 45-ton 8-wheelers, 17x24 cylinders.
5 45-ton Moguls, 17x26 cylinders.
New fire boxes, and engines in A1 condition.
1 46-ton Mogul, 18x24 cylinders.
8 42-ton Moguls, 18x24 cylinders.
1 40-ton 8-wheeler, 17x24 cylinders.
1 40-ton 6-wheel switch engine, 17x22 cylinders.
1 35-ton 8-wheeler, 15x22 cylinders.
1 28-ton 8-wheeler, 14x20 cylinders.
34 and 36 ft. flat cars in stock, 50,000 capacity.
38 36 ft. stock cars.
50 new tank cars in stock, 6730 gallons capacity; immediate delivery.
19 50,000 capacity logging cars.
Coaches, private cars.
Narrow gauge equipment, including 10 36" gauge locomotives of various types, and 6 36" gauge coaches.
Cash or easy payments. Address "LOCOMOTIVE," care of Machinery Dept., Oil, Paint & Drug Reporter.

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The following second-hand boilers and engines are offered; favorable terms will be made:

Engines.

One 16x24 S. C., Washington I. W. Engine, Self-contained.
One 16x20 S. C., Armstrong Engine.
One 13x22 S. C., Caldwell Engine.
One 11x18 C. C., Talbott Engine, Box bed.
One 12x14 C. C., Talbott Engine, Overhanging Cylinder.
One 10x14 C. C. Skinner Engine, Overhanging Cylinder.
One 9x12 C. C. Tanner & Delaney, Overhanging Cylinder.
One 8x10 C. C. Erie City Engine.
One 10 H. P. Frick C. C. Engine.
One 10 H. P. Engine and Boiler, mounted.

Boilers.

One 100 H. P. Return Tubular Boiler.
Two 80 H. P. Return Tubular Boilers.
One 70 H. P. Return Tubular Boiler.
One 55 H. P. Return Tubular Boiler.
One 50 H. P. Return Tubular Boiler.
One 50 H. P. Economic Boiler.
One 40 H. P. Economic Boiler.
One 40 H. P. Compound Boiler.
One 40 H. P. Locomotive Boiler.
Two 25 H. P. Return Tubular Boilers.

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OIL STORAGE TANKS

and Hydraulic Presses and other machinery in that line. We will sell cheap some of t surplus machinery we have on hand not to be used for making Linseed Oil).

AMERICAN LINSEED CO., 315 Dearborn St., Chicago, Ill.

phosphate is easy of operation and is especially suited to countries which, like Algeria, have at hand the necessary raw materials for conducting all the phases of the production.

GOODS ON THE WAY TO THE UNITED STATES.

From Singapore.

TO BOSTON.

Belmont, 3,000 bls gambier.

TO THE UNITED STATES.

Josefa, 8,500 bgs nitrate soda.
Nellie Troop, 16,000 bgs nitrate soda.
Visurgis, 10,000 bgs nitrate soda.
Capac (ss), 28,000 bgs nitrate soda.
Britannia (ss), 10,000 bgs nitrate soda.
Blue Cross (ss), 28,000 bgs nitrate soda.
Creiglands, 15,000 bgs nitrate soda.
King George, 25,000 bgs nitrate soda.
Condor (ss), 28,000 bgs nitrate soda.
Thornhill (ss), 32,000 bgs nitrate soda.
Longships (ss), 40,000 bgs nitrate soda
Cacique (ss), 15,00 bgs nitrate soda.
Earl Derby, 10,500 bgs nitrate soda.
Redhill (ss), 40,000 bgs nitrate soda.
Jeseric (ss), 50,000 bgs nitrate soda.
Cumbal (ss), 30,000 bgs nitrate soda.
Harlock Castle (ss), 20,000 bgs nitrate soda.
Orienta, 15,000 bgs nitrate soda.
Samoena, 18 000 bgs nitrate soda.
Zinita, 20,000 bgs nitrate soda.
Marco Polo, 20,000 bgs nitrate soda.
Beeswing, 17,000 bgs nitrate soda.
Montcalm, 20,000 bgs nitrate soda.
La Banche, 20,000 bgs nitrate soda.
Olivebank, 32,000 bgs nitrate soda.
Fortunato Figari, 25,000 bgs nitrate soda.
Hughenden (ss), 30,000 bgs nitrate soda.
Coya (ss), 28,000 bgs nitrate soda.
Swanhilda, 3,300 bgs nitrate soda.
Ruthwell, 2,100 bgs nitrate soda.

RECORD OF VESSELS.

Port and Name.	Sailed.
From Singapore. To Boston.	
Belmont	Sept. 18.
W. C. S. America.	
Capac (ss)	Due November.
Josefa	Due November.
Nellie Troop	Due November.
Britannia (ss)	Due November.
Blue Cross (ss)	Due November.
Creiglands	Due November.
Visurgis	Due December.
Redhill (ss)	Due December.
Longships (ss)	Due December.
Jeseric (ss)	Due December.
Harlock (ss)	Due December
King George	Due January, 1903.
Condor (ss)	Due January.
Thornhill (ss)	Due January.
Earl Derby	Due January.
Thornhill (ss)	Due January.
Orienta	Due January.
Samoena	Due January.
Zinita	Due January.
Marco Polo	Due January.
Beeswing	Due January.
Montcalm	Due January.
La Banche	Due February.
Olivebank	Due February.
Fortunato Figari	Due February.
Hughenden (ss)	Due February.
Cacique (ss)	Due February.
Coya (ss)	Due February.
Swanhilda	Due February.
Cumbal (ss)	Due March.
Ruthwell	Due March.

Cryolite

Cryolite is a fluoride of sodium and aluminum which in appearance somewhat resembles ice. It occurs in quantity in great snow-white masses which are partially transparent. Its hardness is 2.5, and it has three cleavages. It is obtained exclusively from Ivigtok, in Greenland, on the Arksuk Fiord, one of the deep, rocky, winding bays which penetrate the steep mountain coast at intervals. It constitutes a large bed in a granitic vein in gray gneiss. The cryolite is limited to the granite, and the richer portion is about 500 by 1,000 feet in area. Associated with the cryolite in small amounts are quartz, beautiful crystals of siderite and galena, smaller amounts of sphalerite, pyrite, chalcopryite, and wolframite, which are irregularly scattered through the cryolite. Surrounding this richer portion there is a zone where the chief minerals are quartz, feldspar and avigite, a variety of muscovite-mica. Besides these, there are fluorite, cassiterite, and arsenopyrite, all of which are in a kind of basic ground mass of cryolite. Between this outer zone and the main mass of the cryolite the contact is rather sharply defined; but there is no distinct boundary between the outer zone and the surrounding granite into which it passes. The mineral is mined by open cuts and forms a quarry that is about 600 feet in length by 200 in width and 100 feet or more in depth. Whole cargoes of mineral that were 99.5 per cent. pure cryolite have been obtained from the inner and deeper portions of the quarry.

Cryolite is used sparingly in the manufacture of hydrofluoric acid, its greatest use being in the manufacture of aluminum and sodium salts. In the manufacture of these salts from cryolite, the mineral is first dried and then reduced to a fine powder and intimately mixed with powdered limestone. The mixture is then calcined, in which process the fluorine unites with calcium to form calcium fluoride, which is insoluble in water, while the sodium and aluminum are oxidized and form probably a soluble aluminate of sodium and a carbonate of sodium. By leaching with hot water the aluminate of sodium and the carbonate of sodiumt are removed. Carbon dioxide gas is forced into the tanks containing these solutions, which are kept constantly agitated, and the aluminum is precipitated as aluminum hydroxide, and the sodium forms sodium carbonate. After the precipitate has settled in the settling tanks, the solution containing the sodium carbonate is drawn off, further evaporated, and then passed into large pans, each of about 50 tons capacity, where the solution is evaporated to its maximum degree of concentration, and is then drawn off into the crystallization pans, where the sal soda is allowed to crystallize. The aluminum hydroxide precipitate is washed to free it from traces of sodium carbonate, and, after drying, it is either sold in this rough form or it is manufactured into the sulphate of aluminum, or alum. Cryolite is also used to a limited extent in the manufacture of an opalescent glass which resembles French porcelain. This glass is made from a mixture composed of two parts of powdered cryolite and one of sand (silica), with one-half an equivalent portion of zinc oxide. The resulting opalescent glass is extremely hard and tough, and it is stated that it can be worked as easily as ordinary glass.

There is no cryolite produced in the United States, and it has been found very sparingly in only a few localities in this country: at the southern base of Pike's Peak, El Paso County, Colo., and in the Yellowstone National Park. All of the cryolite used is imported from Ivigtok, Greenland, and the supply is controlled by the Danish Government. There is imported each year into the United States from 5,000 to 10,000 tons.

In the following table are shown the imports of cryolite since 1886:—

IMPORTS OF CREOLITE FROM 1886 to 1901.

Year ending Dec. 31—	Amount. Long tons.	Value.
1886	8,230	$110,152
1887	10,328	138,068
1888	7,388	98,830
1889	8,603	115,158
1900	7,129	95,405
1891	8,298	76,350
1892	7,241	96,932
1893	9,574	126,688
1894	10,684	142,494
1895	9,425	125,368
1896	3,009	40,056
1897	10,115	135,114
1898	6,201	88,501
1899	5,879	78,676
1900	5,437	72,763
1901	5,383	76,886

Lithopone.

The manufacturers of lithopone, according to Dr. E. Kochs and Dr. F. Seigfert, in the Zeitschrift f. Angew. Chemie, nowadays guarantee a certain percentage of zinc sulphide in the various brands, distinguished by a green, red, white, blue or yellow seal, but the analyses conducted by the authors for a number of years showed that very few samples actually possessed the guaranteed amount. After reviewing the various processes of the manufacture of lithopone, and also of the production of sulfopone, they discuss the method of the examination of lithopone and as a reason of the nonfulfillment of the guarantee state that it has been found that the entire percentage of zinc is not contained in the lithopone in the form of zinc sulphide, but that zinc salts soluble in 5 per cent. acetic acid are admixed thereto. They occur therein—generally in the shape of zinc carbonate to the amount of up to 12 per cent., the cause being a faulty process of manufacture.

The separation of the zinc sulphide from the other zinc salts is accomplished with acetic acid of 5 per cent., besides the determination of the total percentage of zinc the determination of the amount of sulphur contained in the lithopone should also always be carried out for verification.

The authors arrive at the final conclusion that 1 to 2 per cent. of zinc salts soluble in diluted acetic acid hardly have any influence upon the quality of the lithopone, but that buyers should not put up with a larger percentage. Since only fifteen of the samples received showed the guaranteed amount of zinc sulphide, it is in the interest of the buyer to always have the merchandise analyzed. The dealers in assuming the guarantee take it for granted that in the manufacture all the zinc combines with sulphur, while this is not always the case if the process of manufacture is faulty. It is therefore his duty to have it properly analyzed, so as to know if the merchandise actually has the guaranteed percentage of zinc sulphide. If the entire amount of zinc found is calculated as zinc sulphide, almost all the lithopones conform to the guarantee. The manufacturers, therefore, are loath to recognize analyses in which this is not done, they losing sight of the fact that with an imperfect mode of production, the reaction between barium sulphide and zinc sulphate does not proceed smoothly.

Attention is also called to the fact that good lithopone should not contain more than 0.2 to 0.3 per cent. of moisture. A product containing more than 2 per cent. can only with difficulty be thoroughly incorporated with oil.

The article closes with the admonition that a very careful taking of samples is an essential condition for the accordance of the analyses, a fact which is only too often disregarded.

A New Glass of Low Solubility.

BY G. E. BARTON.

The statement in a recent number of Science to the effect that American glass is inferior to that made in Germany is without doubt true if for "Germany" we read "Jena." The grounds for the claim that at least one glass made in this country heretofore has been equal to anything made on the continent except Jena glass, I submit herewith. I have here, also, samples of a glass of my own devising which I believe is the equal of the Jena glass as regards its resistance to water, acids and carbonates, and superior in its resistance to caustic alkali solutions. Before presenting the figures, however, a brief resume of the method by which they were obtained and the reason for its choice in preference to others is submitted.

In deciding upon this method for testing the comparative solubility of different glasses I have passed over the beautiful work of Pfeiffer, Kohlrausch, Mylius and Foerster, all of whom have compared different glasses by determining the amount of bases which go into solution upon treating them with water, either by conductivity or purely chemical methods, for a method which is not particularly novel but gives results in the ordinary units of the chemist.

The method employed was as follows: Pint, globe, flat-bottomed flasks were rinsed in chemically pure ammonium hydroxide, then in water, then in chemically pure hydrochloric acid, then in water, and finally with alcohol and ether, after which they were dried at the temperature of the room by a current of dry air, carefully wiped with a towel, and allowed to stand exactly one-half hour before weighing. The weighing was carried to o. 1 mg. with the ordinary precautions of analytical chemistry. I am aware that the glass could not have been free from water at the time of weighing, but every effort was made to insure as uniform a state as regards moisture as possible.

The flasks after weighing were partially filled with exactly 300 cc. of a 1 per cent. solution of sodium carbonate, attached to an inverted condenser by a rubber stopper, and boiled for exactly three hours over an asbestos plate one-sixteenth inch thick heated by a Bunsen burner, the latter being so regulated as to produce as slow but constant an ebullition as possible. The level of the liquid was not appreciably lowered in the three hours. At the end of this time the flasks were disconnected, emptied, rinsed with water three times, then treated precisely as before the boiling, and weighed; 300 cc. of water were next used, then 300 cc. of a solution containing 0.4 per cent. of hydrochloric acid, and finally the same quantity of a 1 per cent. solution of sodium hydroxide, the weighing, rinsing and drying always being carried out as above described.

That this method gives results sufficiently accurate for factory control I have proved repeatedly. It has the great advantage that it can be applied by any one in almost any laboratory, as it only requires the ordinary forms of apparatus and reagents, and if used for comparing two samples of glass, no particular care as to the exact strength of the solutions used is necessary, provided only both are treated alike. The greatest cause of variation in testing the ordinary quality of chemical ware is that the surface layer of the glass, after partial extraction with the solvent, is more or less completely removed by the mechanical action of the escaping steam. This cause of variation becomes almost nothing, however, in testing glasses like the Jena normal glass and the new glass.

Mylius and Foerster found that the ratio of the bases to silicic acid in the aqueous solution obtained by boiling water five hours in flasks, varied from 1:0.21 to 1:1.6, the figures being for a poor glass from Thuringia and Kavalier's glass respectively. From this it is plain that no conclusions as to the total amounts going into solution can be drawn with safety from the results of any method which only gives the amount of bases taken up. It is also clear that such a method cannot be used for comparing glasses so totally different in composition as those made by Schott at Jena and by Kavalier in Bohemia. While the unavoidable variations (when testing by the method I used) between different results with the same glass are sometimes rather large, it is also certain that they are equally great in using the ware, so that an average of a sufficient number of results comes nearer representing actual practice than anything else that has been proposed

Each of the following figures is an average of three results and represents the loss in milligrams sustained by flasks when tested as described:—

LOSS PER FLASK EXPRESSED IN MILLIGRAMS.

	Whitall-Tatum. Co.	Kavalier.	Jena.	New glass.
One per cent. sodium carbonate solution	134.4	126.6	30.6	32.3
Water	8.4	20.8	1.1	0.7
Two-fifths per cent. hydrochloric acid solution	4.7	16.2	1.3	1.5
One per cent. sodium hydroxide solution	100.1	78.4	97.1	89.0
Total loss	247.6	241.8	130.1	123.5

The variations between the new glass and the Jena glass are, with the exception of the solubility in 1 per cent. sodium hydroxide solution, within the limits of factory practice. In resisting caustic soda solution, however, the new glass is undoubtedly superior to the Jena glass.

It may not be out of place at this time to call attention to the fact that beakers made of either the new glass or Jena glass can be used for evaporations on the water-bath without danger of cracking. A few tests of beakers made from other kinds of glass will convince one that very few pieces will stand exposure to steam for more than fifty hours. I have exposed beakers of both the new and Jena glass to the action of steam for over 200 hours continuously, without any sign of fracture appearing.—Journal Am. Chemical Society

(Special Correspondence to The Reporter.)

To Liberalize the Drawback Laws

Washington, Nov. 7, 1902.

The Committee of Manufacturers organized to secure legislation liberalizing the drawback laws is about to send out a communication to a number of manufacturers who have undertaken, or who desire to undertake, an export business, soliciting an expression of their views, and especially as to whether any reforms are desired in the drawback laws other than those included in the so-called Lovering bill. The attention of manufacturers is drawn to the fact that although they may not at the present time be using any imported dutiable materials in the filling of export orders, yet they may find it advantageous to do so at almost any time; hence they have an indirect interest in the enactment of the proposed legislation, even though they might not profit by it at the present time.

In this communication the committee wish to emphasize the fact that under the Lovering bill manufacturers who have imported foreign raw materials sufficient in quantity to fill an export order would be in a position to secure drawback of duty paid thereon upon the shipment of the order, though unable to identify the materials or even if domestic materials of equal productive value had been used. It is believed that manufacturers in many trades will find it convenient to import from time to time more or less foreign materials, thus putting themselves in position to fill export orders with benefit of drawback on very short notice. In soliciting the views of manufacturers as to the proposed legislation the committee says in part:—

"We send you herewith copy of a bill (H. R. 15239) introduced in Congress during the past session by the Hon. William C. Lovering of Massachusetts, which is intended to make the recovery of duties paid on imported materials used in the manufacture of exported articles simpler and easier than under the existing drawback laws and regulations. This bill was referred by the Committee on Ways and

Means to a sub-committee, for the purpose of perfecting its form, with a view to reporting it to the House at the coming session of Congress.

"Under the present drawback law, and the regulations prescribed by the Secretary of the Treasury for carrying it into effect, a manufacturer cannot recover drawbacks to which he is entitled unless he swears that certain imported materials were actually used in producing the exported articles. This requirement is very difficult, and often impossible, to comply with, as like domestic and imported materials are frequently used in the production of goods intended for sale both in domestic and foreign markets, with the result that the manufacturer is unable to state whether imported or domestic materials were used in the production of any particular shipment of exported articles.

"The necessity for keeping goods manufactured in part from imported materials on which drawback is to be claimed separate from those made from similar domestic materials involves considerable trouble and expense to exporting manufacturers.

"In event of the enactment of the Lovering Bill drawback would be paid in every case where the manufacturer could show that the imported dutiable materials on which a drawback was claimed has been received into his factory, and that he had exported articles made from these materials or from like materials of the same productive or effective value. This would make the collection of drawbacks certain even though the manufacturer was unable to swear that the imported materials which he had received into his factory were actually used in making any particular lot of his products.

"Although you may not now be using any imported dutiable materials the occasion may arise in the near future when it will be to your advantage to use foreign materials, with the benefit of drawback, in manufacturing for the export trade. You can readily see that in that case the enactment of the Lovering Bill would be a decided benefit to you.

"It is the intention of this committee to carry on an active movement in favor of the enactment of the bill, in order to bring the influence of the exporting manufacturers of the country to bear on their Senators and Representatives in its behalf. We believe that if the importance of the measure is properly presented to Congress by the committee, and the manufacturers interested, that its enactment at the coming session of Congress can be secured.

"We are desirous of submitting to Congress information as to the extent to which the proposed liberalization of the drawback laws is favored by the manufacturers interested, and will therefore be indebted to you if you will kindly advise us as to whether you approve of the purpose of the bill.

"If you have any suggestions to make in regard to further reforms in the drawback laws than those included in this bill we will be pleased to have you submit them to us."

While it is the general purpose of the Manufacturers' Committee to urge the passage of the Lovering Bill it is nevertheless prepared to advocate such additional amendments that may be suggested as appear to be desirable after careful investigation of their provisions and probable effect.

(Special Correspondence to the Reporter.)

Chicago Seed and Oil Market.

Chicago, Nov. 6, 1902.

Flaxseed again ruled weak with prices off 3@5c. at Chicago. At Duluth and Minneapolis values were better sustained than here and closed with only fractional losses for the week. The decline was due more to foreign conditions than to the situation in this country, although even the latter is against the buyer. A cable from Rosario estimated the Argentine crop at 23,000,000 bushels. As nearly all the Argentine dom and Continental markets may be seed is exported, some idea of the effect of such a crop on the United King- inferred from a study of the exports from that country for the last ten years:—

ARGENTINE EXPORTS.

1902 (crop)	23,000,000
1901	14,250,000
1900	8,338,000
1899	9,117,000
1898	5,698,000
1897	6,763,000
1896	9,200,000
1895	10,209,960
1894	4,197,400
1893	2,888,000
1892	1,719,480

In Argentina the situation resolves itself into a question of weather conditions during the critical period of the growing crop—the maturing and harvesting periods, which cover this month and next. Thus far the conditions have been very favorable, but the crop has not yet advanced beyond danger of possible future damage. Should Argentina have anything like 20,000,000 bushels to export the world's supply would be increased to that extent and it would act as a strong influence toward a lower range of prices. So far all indications point to a full supply for the foreign markets, which would indicate that prices will go yet lower rather than higher. The very large demand for oil has undoubtedly had an influence on the price of flax in the United States and prices have been abnormally high, considering the prospective supply and as compared with prices in other markets. The legitimate value of flaxseed when a large surplus exists is its export value, and yet prices for flax in this country have been held above export values most of the time. It would seem to have had an artificial strength given it, which may sustain the market for a while, but later on natural conditions will assert themselves. These natural conditions point to further weakness, though it must be remembered that in all declining markets there are temporary periods of strength. This is well illustrated in the course of prices in October, when prices from the 20th to the 27th advanced 6c., although the general conditions at that time were of a bearish nature. The October close showed a loss for the month of 7@10c., due principally to the heavy movement. The ups and downs of the various deliveries were as follows:—

The October movement as reported daily by cars follows:—

	N.W.	No. 1.	Oct.	Nov.	Dec.	May.
Oct. 1	1.25½	1.25½	1.25	1.26	1.26	1.27
Oct. 2	1.27½	1.26½	1.26	1.26½	1.26½	1.30
Oct. 3	1.28	1.27	1.27½	1.28	1.28	1.30
Oct. 4	1.28	1.27	1.27½	1.26½	1.26½	1.30
Oct. 6	1.27	1.25	1.26¼	1.25½	1.25½	1.30
Oct. 7	1.26	1.24½	1.24½	1.23	1.23	1.29
Oct. 8	1.25	1.23	1.23	1.23	1.23	1.28½
Oct. 9	1.25½	1.24	1.24	1.24	1.24	1.28½
Oct. 10	1.26	1.24½	1.24½	1.24	1.24	1.29
Oct. 11	1.26	1.24	1.24½	1.24	1.24	1.28½
Oct. 13	1.25	1.23	1.24	1.24½	1.24	1.27½
Oct. 14	1.25	1.23	1.23½	1.23½	1.23	1.28½
Oct. 15	1.25	1.22	1.23	1.23	1.20	1.25
Oct. 16	1.21	1.18	1.21	1.21	1.20	1.22½
Oct. 17	1.19	1.18	1.18	1.18	1.18	1.20½
Oct. 18	1.20	1.18	1.19	1.19	1.18	1.22½
Oct. 20	1.20	1.18	1.18	1.18	1.18	1.20½
Oct. 21	1.21	1.18	1.20	1.18	1.18	1.21
Oct. 22	1.22½	1.18	1.22	1.18	1.18	1.23
Oct. 23	1.23	1.21	1.21	1.20	1.20	1.23
Oct. 24	1.24	1.22	1.22	1.20	1.20	1.23½
Oct. 25	1.25	1.23	1.23	1.23	1.23	1.26
Oct. 27	1.25	1.24	1.24	1.24	1.24	1.26½
Oct. 28	1.24	1.22	1.23	1.23	1.23	1.24½
Oct. 29	1.21	1.19	1.21	1.18½	1.18½	1.21
Oct. 30	1.20	1.18	1.19	1.18	1.18	1.20½
Oct. 31	1.18	1.15	1.18	1.18	1.16	1.20
Av. p.c.	1.24	1.22	1.23	1.22	1.22	1.25

THE OCTOBER MOVEMENT (cars).

	Chicago.	Duluth.	Minneapolis.	Total.
Oct. 1	21	192	22	235
Oct. 2	20	167	50	237
Oct. 3	14	153	45	212
Oct. 4	22	133	50	205
Oct. 6	30	177	115	322
Oct. 7	11	328	43	382
Oct. 8	23	158	84	265
Oct. 9	11	131	46	188
Oct. 10	15	266	73	354
Oct. 11	8	273	64	345
Oct. 13	32	246	140	418
Oct. 14	17	592	66	675
Oct. 15	25	283	46	354
Oct. 16	14	418	69	501
Oct. 17	6	349	66	481
Oct. 18	15	365	52	432
Oct. 20	21	410	73	504
Oct. 21	20	416	52	488
Oct. 22	11	210	68	289
Oct. 23	9	298	73	460
Oct. 24	13	176	83	272
Oct. 25	22	309	51	382
Oct. 27	29	300	102	431
Oct. 28	29	403	74	506
Oct. 29	10	228	50	288
Oct. 30	7	279	103	389
Oct. 31	17	180	65	262
Totals	472	7,450	1,825	9,747
Totals, 1901	739	5,119	2,157	8,015
Totals, 1900	1,246	3,560	2,776	7,582
Totals, 1899	1,711	5,407	1,249	8,367

Aside from the drop of 3c. early in the week at Chicago, the price tables contain nothing of interest. Closing prices at the three markets were:—

FLAX PRICES AT CHICAGO.

	N. W.	No. 1.	Nov.	Dec.	May.
Oct. 30	1.20	1.18	1.19	1.18	1.20½
Oct. 31	1.18	1.15	*1.13	1.16	1.20
Nov. 1	1.18	1.15	1.15	1.16	1.20½
Nov. 3	1.18	1.15	1.15	1.15	1.19
Nov. 4	Elections.				
Nov. 5	1.17	1.14	1.14	1.14	1.19
1901—					
Nov. 6	1.49	1.48	1.48	1.45	1.50
1900—					
Nov. 7	1.78	1.76	1.75	1.75	1.74
1899—					
Nov. 8	1.28	1.27½	1.26¾	1.27¼	1.28

*Bid.

AT DULUTH.

	Cash.	Nov.	Dec.	May.
Oct. 30	1.16¼	1.16	1.15½	1.20
Oct. 31	1.15¼	1.15¼	1.14¾	1.19¾
Nov. 1	1.15½	1.15½	1.15	1.19½
Nov. 3	1.15¾	1.15¾	1.15¼	1.19¾
Nov. 4	Elections.			
Nov. 5	1.15½	1.15½	1.15¼	1.19¾

AT MINNEAPOLIS.

	Cash.	Nov.	Dec.	May.
Oct. 30	1.16¼	1.16	1.15½	1.20
Oct. 31	1.15	1.15	1.14½	1.19¼
Nov. 1	1.15	1.15	1.14½	1.19¼
Nov. 3	1.15¾	1.15¼	1.15¼	1.19¾
Nov. 4	Elections.			
Nov. 5	1.15¾	1.15½	1.15¼	1.19¾

Receipts at Chicago dribbled in in the usual way, but in much less volume than either last week or last year. Chicago receipts:—

Oct.	N.W.	No. 1.	Rej.	No grde.	Non-Insp.	Total, 1902.	Total, 1901.
30	..	2	3	1	1	7	36
31	1	5	8	1	2	17	38
Nov.							
1	..	5	7	..	..	12	28
2	..	..	..	..	..	..	18
4	Election.						69
3	..	2	17	..	3	*22	..
5	..	13	18	1	..	32	35
Totals	1	27	53	3	6	90	224
Totals on crop.	54	523	690	97	291	1,656	2,075

*In addition to these 22 cars, 94,230 bushels were received by lake.

The three points now are running behind the receipts for the corresponding period last year. The figures:—

	Chicago.	Duluth.	Minneapolis.	Total, 1902.	Total, 1901.
Oct. 30	7	270	103	380	344
Oct. 31	17	180	65	262	436
Nov. 1	12	267	99	378	429
Nov. 2	..	..	..	..	541
Nov. 3	22	280	148	450	..
Nov. 4	Elections.				448
Nov. 5	32	544	153	729	623
Totals	90	1,550	568	2,208	2,821
Totals on crop	1,656	10,697	4,037	16,536	13,921

Shipments from Chicago were unimportant, as follows:—

	N.W.	No. 1.	Rej.	Total 1902.	Total 1901.
Oct. 30	..	.....	.....	.....	979
Oct. 31	..	9,258	.....	9,258	.....
Nov. 1	..	2,000	.....	2,000	.....
Nov. 2	..	.....	.....	.....	748
Nov. 3	..	.....	.....	.....	.....
Nov. 4	Election	.....	.....	.....	5,935
Nov. 5	..	.....	3,015	3,015	6,447
Total	..	11,258	3,015	14,273	14,109

The Chicago in store:—

1902.	N.W.	No. 1.	Rej.	Total.
Nov. 1	.....	17,731	..	17,731
Oct. 25	.....	35	..	35
Inc	.....	17,698	..	17,698
1901.				
Nov. 2	7,099	8,322	..	15,421
Oct. 26	12,187	324	..	12,511
Inc	*5,088	7,998	..	2,910

*Decrease.

Figures on the total visible:—

1902.	Chicago.	Duluth.	Minneapolis.	Total.
Nov. 1	17,731	1,980,210	510,554	2,508,495
Oct. 25	35	2,210,159	376,693	2,586,887
Dec.	*17,696	229,949	*133,861	78,392
1901.				
Nov. 2	15,421	2,149,223	331,086	2,495,730
Oct. 26	12,511	1,251,030	216,112	1,479,653
Inc.	2,910	898,193	114,974	1,016,077

*Increase.

LINSEED OIL.—There has been a very active demand on contracts, which has absorbed so much of the spot oil that prices have advanced 1c. for prompt delivery, the spot price going to 42c., and firmly held at that.

LINSEED CAKE.—Market very dull, with a downward tendency. Foreigners have no confidence in present prices and are sending orders for only limited quantities. The short interest which has appeared from time to time both here and abroad has been the only sustaining feature of the market, and with this eliminated prices would probably seek a considerably lower level. The market nominally is $22@22.50 f. o. b. Chicago for November shipment.

CLOSING TELEGRAM.

Flaxseed sharply higher on reduced receipts and higher Northwestern markets. No. 1 Northwestern advanced 5c., to $12.22; contract No. 1 and November and December options 3c. higher, at $1.17; May 3c. higher, at $1.22. Trading light.

Patents Granted.

709,957.—METHOD OF PRODUCING WHITE LEAD.—John W. Bailey, Jersey City, N. J. Filed March 14, 1901. Issued Sept. 30, 1902.

709,971.—ELECTROLYTIC DECOMPOSITION OF ALKALINE SALTS.—Edwin Edser and Meyer Wildermann, London, England. Filed March 28, 1901. Issued Sept. 30, 1902.

710,005.—PROCESS OF MAKING ORGANIC PEROXIDES. — Ralph H. Page, Detroit, Mich. Filed Sept. 10, 1901. Issued Sept. 30, 1902.

710,032. — MACHINE FOR MAKING GLASS PLATES.—Leon Appert, Paris, France. Filed Feb. 6, 1901. Issued Sept. 30, 1902.

710,059.—BROWN-VIOLET AZO DYE. Paul Julius, Ludwigshafen, Germany. Filed July 1, 1902. Issued Sept. 30, 1902.

710,060.—CAPSULE FOR MEDICINES.—Desiderius S. Kann, Weinberge, Austria-Hungary. Filed June 11, 1902. Issued Sept. 30, 1902.

710,139.—NON-REFILLABLE BOTTLE.—Herman Breunig and Henry J. Waldeyer, New-York, N. Y. Filed Feb. 26, 1902. Issued Sept. 30, 1902.

FOREIGN MAILS.

The following gives the date and time of closing the mails for foreign countries at the New York postoffice. The star indicates that letters may be addressed per steamer named for the countries indicated. The section indicates that registered mails close at 6 p. m. on the previous day. In case of mails via steamers from Pacific ports the hour of closing is up to the date specified.

After the closing of the supplementary transatlantic mails named below additional supplementary mails are opened on the piers of the American, English, French and German steamers, and will remain open until ten minutes of the hour of sailing.

Regular and supplementary mails close at foreign station half an hour later than closing time shown below (except that supplementary mails for Europe and Central America, via Colon, close one hour later at foreign station).

Mails for—	Steamer.	Date.	Mails close at P. O. Regular.	Suppl.
Azores Islands (From Boston)	Cambromann	Nov. 10..	11.30 p. m..	—
Barbadoes and No. Brazil	Horatio	Nov. 10..	12 m..	—
Newfoundland direct	Silvia	Nov. 11..	7 a. m..	—
Leeward and Windward Islands, British, Dutch and French Guiana	Caribbee	Nov. 11..	12.30 p. m..	1.30 p. m.
Italy	Liguria	Nov. 11..	8.30 a. m..	—
Central America (except Costa Rica) and South Pacific ports, via Colon*	Finance	Nov. 11..	10.30 a. m..	—
Jamaica (From Boston)	Adm. Farragut	Nov. 11..	6.30 p. m..	—
Europe, via Southampton*	St. Louis	Nov. 12..	6.30 a. m..	—
Europe, via Queenstown*	Teutonic	Nov. 12..	8.30 a. m..	10 a. m.
Yucatan	Tjomo	Nov. 12..	12 m..	—
Turks Island and Dominican Republic	Cherokee	Nov. 12..	12.30 p. m..	1 p. m.
Jamaica (From Philadelphia)	Admiral Schley	Nov. 12..	11.30 p. m..	—
Cuba, Campeche, Yucatan, Tabasco and Chiapas*	Monterey	Nov. 13..	8 a. m..	—
France, Switzerland, Italy, Spain, Portugal, Turkey, Egypt, Greece, British India and Lorenzo Marquez*	La Lorraine	Nov. 13..	7 a. m..	—
Guantanamo and Santiago	Santiago de Cuba	Nov. 13..	12 m..	—
Mexico	Niagara	Nov. 14..	12 m..	—
Bermuda (From Halifax)	Steamer	Nov. 14..	6.30 p. m..	—
Pernambuco, Santos and Sao Paulo	Syracusa	Nov. 15..	4 a. m..	—
Haiti	Athos	Nov. 15..	9.30 a. m..	10.30 a. m.
Grenada and Trinidad	Grenada	Nov. 15..	10 a. m..	—
Leeward and Windward Islands, British, Dutch and French Guiana	Korona	Nov. 15..	12.30 p. m..	1.30 p. m.
Cuba, via Matanzas	Olinda	Nov. 15..	12.30 p. m..	—
Italy direct	Aug. Victoria	Nov. 15..	8.30 a. m..	—
Cuba, via Havana	Morro Castle	Nov. 15..	10 a. m..	—
Scotland direct*	Columbia	Nov. 15..	12.30 p. m..	—
Europe, via Queenstown	Umbria	Nov. 15..	10.30 a. m..	12 m.
Fortune Islands, Jamaica, Savanilla and Cartagena	Altai	Nov. 15..	9.30 a. m..	10.30 a. m.
Porto Rico, Curacao and Venezuela	Caracas	Nov. 15..	9 a. m..	9.30 a. m.
Netherlands	Statendam	Nov. 15..	7.30 a. m..	—
Belgium direct	Friesland	Nov. 15..	8 a. m..	—
§China and Japan, via Seattle	Shinano Maru.	To Nov. 12..	6.30 a. m..	—
§China and Japan, via Tacoma	Victoria	To Nov. 14..	6.30 p. m..	—
§Philippine Islands, via San Francisco	U. S. Tr'sport.	To Nov. 26..	6.30 p. m..	—
§Hawaii, China and Japan, via San Francisco	Gaelic	To Nov. 10..	6.30 p. m..	—
§Hawaii, via San Francisco	Alameda	To Nov. 10..	6.30 p. m..	—
†§Australia (except West Australia and New Zealand) and Fiji Islands, via Vancouver and Victoria, B. C.	Aorangi	To Dec. 6..	6.30 p. m..	—
§Australia (except West Australia), New Zealand, Hawaii, Fiji and Samoan Islands, via San Francisco	Sonoma	To Nov. 22..	6.30 p. m..	—
§Tahiti and Marquesas Islands, via San Francisco	Mariposa	To Dec. 1..	6.30 p. m..	—
§Hawaii, China, Japan and Philippines, via San Francisco	H. K. Maru	To Nov. 20..	6.30 p. m..	—
§China and Japan, via Vancouver and Victoria, B. C.	Em. of China.	To Nov. 25..	6.30 p. m..	—

Mails for Newfoundland, by rail to North Sydney, and thence by steamer, close at the postoffice daily at 6.30 p. m. (connecting close here every Monday, Wednesday and Saturday). Mails for Miquelon, by rail to Boston, and thence by steamer, close daily at 6.30 p. m. Mails for Cuba, by rail to Port Tampa, Fla., and thence by steamer, close daily, except Thursday, at §5.30 a. m. (the connecting closes are made on Mondays, Wednesdays and Saturdays). Mails for Mexico City, overland, unless specially addressed for dispatch by steamer, close daily, except Sunday, at 1.30 p. m. and 11.30 p. m., Sundays at 1.00 p. m. and 11.30 p. m. Mails for Costa Rica, Belize, Puerto Cortes and Guatemala, by rail to New Orleans, and thence by steamer, close daily, except Sunday, at §1.30 p. m. and §11.30 p. m., Sundays at §1.00 p. m. and §11.30 p. m. Mails for Belize, Puerto Cortez and Guatemala, close here Mondays at §11.30 p. m. for Belize, Puerto Cortez and Guatemala, and Tuesdays at §11.30 p. m. for Costa Rica). §Registered mail closes at 6.00 p. m. previous day.

†After Nov. 22.

INDUSTRIAL SECURITIES.

General trade conditions have developed further improvement, according to reports from nearly every section of the country, and these are confirmed by the reports of the transportation companies, who claim that the movement of freight is larger than ever and who find their facilities taxed to the utmost. In the lines of trade represented by the Reporter an increased demand is reported for chemicals, with considerable business doing in contracts for future deliveries, some of these extending to midsummer next year. The movement of drugs has also been somewhat better and compares favorably with that of a year ago. Dyestuffs have been in improved request, most manufacturers and dealers reporting increased orders. Paints show no falling off, the demand continuing later than usual, the continued large consumption being attributed to the general prosperous condition of the agricultural classes and to the favorable weather for outdoor work. Oils continue fairly active, though the animal oils show falling off by reason of their relatively high price. The industrial situation has improved, there being now no fear of difficulty in obtaining ample supplies of coal, and although labor troubles threaten many industries there is apparent confidence that these will not become serious. Orders are being offered and accepted with confidence that there will be no serious delays, though in the building trades tie-ups are predicted by some. The labor situation shows no improvement, strikes having been quite numerous, though few have been reported which are of considerable extent and nearly all were local. There is, however, a growing disposition to resort to strikes to enforce the demands of the artisans, and important strikes may occur unless averted by mutual concessions. The strike of the street railway operators in the Hudson Valley, which had caused much annoyance and where much rioting was indulged in, necessitating the calling out of the militia, has been settled. The great agricultural staples have shown only slight variatioss, which may be attributed to trading influences, though cotton has developed a decided tendency to a lower range. Wheat opened on Monday at 78¼c., and varied during the week within the range of 77¾@78⅝c., closing on Friday at 78⅝c., for December delivery. Corn showed only slight variation, the range for the week being 54⅝@55½c., with the close on Friday at 55⅝c, for December delivery. Oats started the week at 35¼c. and gradually hardened, closing on Friday at 35¾c., for December delivery. Cotton developed a weakening tendency, which became more pronounced as the week advanced. The range for the week for December delivery was 8.12@8.47c., with the close on Friday at 8.15c. Lard advanced steadily and rapidly, going from 9.12½c. on Monday to 9.50c. on Thursday, and closing on Friday at 9.40c. at Chicago for January delivery. The market for time money has ruled strong, while the supply has been ample and demand has been good. Rates at the close were 6 per cent. for 30 to 60 days, 5½@6 per cent. for 90 days to 4 months, and 5½@6 per cent. for longer periods. Money on call on the Stock Exchange has ranged from 3½ to 6 per cent., with the bulk of the business done at 5 per cent. The average rate was 5 per cent. The closing rate on Friday was 6 per cent. Mercantile paper has been moving rather slowly during the past week, with the supply and demand both fair. Rates at the close were 5½ per cent. for 60 to 90 days indorsements, 5½@6 per cent. for choice single names having four to six months to run, and 6@6½ per cent. for other grades. The price of bar silver weakened daily and closed weak on Friday at 50@51¼c. for commercial bars and 50¼@51½c. for Government assay bars, showing a decline of ½c. from the closing price of last week. Mexican dollars closed at 39½c. bid and 41½c. asked. The market for sterling exchange varied daily, but developed strength later and closed higher. Rates for actual business at the close were 4.83¾@4.84 for 60 days, 4.87@4.87¼ for demand, and 4.87½@4.87¾ for cables. The supply of grain and cotton bills has been good, while the rates have been stronger and the demand fair. Rates at the close were 4.83@4.84.

In the following table are given the closing quotations Friday night. The market review is complete to Saturday's close.

Name.	Stock Outstanding.	Dividends Payable.	Last Dividend.	Bid.	Asked
Am. Agc'l Chemical Co.	$16,715,600	Q.—J.	.....	20	25½
pref. 6%*	17,153,000	A.&O.	Oct. 1, '02, 3%	79	83
Am. Alkali Co.	24,000,000	.....	.....	¼	¼
pref. 8 %*	2,400,000	.....	.....	.	
Am. Chicle Co.	6,000,000	Q.—J.	Oct. 10, '02, 1%	133	140
pref. 6%*	3,000,000	Q.—J.	Oct. 1, '02, 1½%	90	94
Am. Cotton Oil Co.	20,237,100	D.	Dec. 2, '01, 2%	53⅛	53½
pref. 6%	10,198,600	J.&D.	June 2, '02, 3%	96½	99
bonds, 4½ s.	3,000,000	Q.—F.	.....	..	..
Am. Degras Co.	500,000	.....	.....	..	..
Am. Linseed Co.	16,750,000	.....	.....	17	20
pref. 7%	16,750,000	Q.—M.	Sept. 15, '00, 1¾%	40	45
Am. Smelt. & Ref. Co.	50,000,000	.....	.....	44	45
pref. 7%*	50,000,000	Q.—J.	Oct. 7, '02, 1¾%	94	95
Am. Snuff Co.	11,001,700	.....	.....	127	132
pref.	12,000,000	Q.—J.	Oct. 1, '02, 1½%	97	100
Am. Soda Fountain Co.	1,250,000	.....	.....	3	6
pref.	1,250,000	Q.—J.	Nov. 20, '01, 6%	65	75
2d pref.	1,250,000	.....	.....	14	18
Am. Straw Board Co.	6,000,000	Q.—M	Dec. 27, '00, 1%	46	46½
Am. Sugar Refining Co.	44,246,100	Q.—J.	Oct. 2, '02, 1¾%	115⅞	116
pref. 7%*	44,068,300	Q.	Oct. 2, '02, 1¾%	117	119
Am. Tobacco Co. 6%	54,500,000	Q.—F	Nov. 1, '02, 2½%	..	
pref. 8%	14,000,000	Q.—F.	Nov. 1, '02, 2%	146	147
div. scrip 1898 6%	3,024,490	M.&N.	.....	..	..
Am. Window Glass	13,000,000	.....	Oct. 15, '02, 1½%	52½	53¼
pref. 7%	4,000,000	M.&S.	Sept. 1, '02, 3½%	..	..
Celluloid Co. 6%	5,925,000	Q.—J	Oct. 1, '02, 1½%	..	..
Chesebrough Mfg. Co.	500,000	Monthly.	.....	455	470
Compressed Gas Capsule Co.	13,500,000	.....	.....	..	..
pref. 8%	1,500,000	.....	.....	..	..
Continental Tobacco Co.	48,844,600	.....	Oct. 2, '02, 2½%	..	..
pref. 7%	48,846,100	Q.—J.	Oct. 2, '02, 1¾%	119½	119¾
Con. Stock & Pet. Ex. Mem.	†($2,500)				
Corn Products Co.	50,000,000	Q.—J.	July 10, '02, 1¾%	31	31¼
pref. 7%*	30,000,000	.....	Oct. 10, '02, 1¾%	82	84
Diamond Match Co.	15,000,000	Q.—M.	Sept. 12, '02, 2½	136	140
Distilling Co. of America	44,546,973	.....	.....	5¼	5⅝
pref. 7%*	29,464,318	.....	Jan. 15, '02, 1%	37	38
Dixon Crucible Co.	734,500	●.—J.	Jan. 15, '03, 1%	38⅜	39
Fisheries Co.	532,867	J.&J.	.....	..	..
pref. 7%	2,000,000	J.&J.	Jan. 1, '01, 3½%	..	
General Chemical Co.	7,410,300	Q.—M.	Sept. 2, '02, 1%	63	66
pref. 6%*	9,416,000	Q.—J.	Oct. 1, '02, 1½%	100	103
Glucose Sugar Refining Co.	24,027,300	Q.—M.	Dec. 2, '01, 1%	..	..
pref. 7%*	13,638,300	Q.—M.	Dec. 2, '01, 1¾%	..	..
Harrison Bros. Co.	1,000,000	.....	.....	..	..
pref.	1,500,000	Q.—F.	Aug. 15, '01, 1¾%	..	..
bonds, 5%, 1924.	1,300,000	.....	.....	..	..
International Pulp Co.	5,000,000	.....	.....	..	..
Maritime Ex. Mem.	†($55)				
National Lead Co.	14,905,400	.....	Mar. 1, '00, 1%	27¼	27½
pref. 7%*	14,904,000	Q.—M.	Sept. 15, '02, 1¾%	91	92½
National Wall Paper Co.	30,000,000	.....	.....	..	55
pref. 8%	3,000,000	.....	.....	..	..
New Jersey Zinc Co.	10,000,000	.....	.....	..	234½
Penn. Salt Mfg. Co.	3,000,000	A.&O.	Oct. 15, '02, 6%	112	..
Pittsburgh Plate Glass Co.	9,850,300	Q.—J.	.....	148	150
pref.	150,000	.....	.....	257	..
P. Lorillard Co.	3,000,000	.....	.....	..	..
pref. 8%*	2,000,000	Q.—J.	Jan. 2, '02, 2%	125	..
Planters' Compress Co.	20,000,000	.....	.....	..	..
Procter & Gamble Co.	4,500,000	Q.—F	Nov. 15, '02, 3%	335	340
pref. 8%*	2,250,000	Q.—J.	Oct. 15, '02, 2%	200	203
1st mort. bonds, 6% g.	1,000,000	J.&J.	.....	113	116
Produce Exchange Membership.	†($300)				
Quicksilver Mining Co.	5,708,700	.....	.....	2¼	3
pref. 7%	4,291,300	.....	May 9, '02, ½%	7	9
Royal Baking Powder Co.	10,000,000	.....	.....	..	..
pref. 6%*	10,000,000	Q.—J.	Sept. 30, '02, 1½%	104	105½
Southern Cotton Oil Co.	2,000,000	J.&D.	June 14, '02, 4%	55	55⅛
Standard Oil Co.	97,500,000	Q.—M.	Sept. 15, '02, 5%	679	680
Stillwell, Bierce & Smith Valle Co.	500,000	.....	.....	..	..
U. S. Glass	3,458,100	.....	.....	36	37
pref	600,000	.....	Mar. 10, '02, 4%	140	150
U. S. Leather Co.	62,882,300	.....	.....	13½	13¾
pref. 8%*	62,282,300	Q.—J.	Oct. 1, '02, 1½%	90¼	90½
bonds, 6% g.	5,280,000	M.&N.	.....	..	..
U. S. Playing Card Co.	3,600,000	.....	.....	94	96
U. S. Printing Co.	3,500,000	.....	.....	79	83
U. S. Rubber Co.	23,666,000	.....	Apr. 30, '00, 1%	17½	18½
pref. 8%	23,525,500	Q.—J.	Jan. 31, '01, 1%	54	57
Union Talc Co.	1,000,000	.....	.....	..	..
Virginia-Carolina Chem. Co.	27,984,400	Q.—M.	Sept. 1, '02, 1¼%	65⅞	66
pref. 8%*	12,000,000	Q.—J.	Oct. 15, '02, 2%	125	128

*Cumulative. †Price of last seat sold.

The Industrials were uninfluenced by the course of the general market and there were no developments to affect these securities as a class, but Sugar and Va.-Car. Chemical stocks suffered declines. Trading, while moderate as a whole, was active in Sugar, while Linseed Oil was neglected. The general list of securities dealt in on the Stock Exchange was rather irregular, there being no general movement either way, though at times there were indications of a weakening tendency. Trading was moderate and at times rather tame.

Sugar stock showed weakness on Monday, and when a cut in the price of the product was announced on Wednesday the stock broke below 120, which caused free offerings, many trying to "get out from under," preferring to take their losses rather than risk heavier ones. The downward movement was thus accentuated, and when a further reduction in sugar was announced, with reports of active competition with beet sugar, the stock receded several points further. The last sale on Friday was at 116.

The fluctuations during the week have been from 113⅞@123, the lowest Saturday and the highest Wednesday, closing to-day at 114⅞ bid.

Cotton Oil stock has been unaffected by reports or rumors, and the course of the general market had no influence, the variations being attributed entirely to trading. The announcement of a dividend of 6 per cent.—4 per cent. payable Dec. 1 and 2 per cent. payable June 1 next—caused an advance, a part of which was later lost. A balance of $412,000 is carried to the surplus account, showing the business of the concern to have been exceptionally good. The last sale on Friday was at 53¼.

The fluctuations during the week have been from 51@54¼, the lowest Wednesday and the highest Thursday, closing to-day at 52½ bid.

Lead stock received considerable attention, but the stock was allowed to sag, there being an impression that the negotiations so long talked about were not progressing satisfactorily, as nothing had been learned and no definite information was given out. The last sale on Friday was at 27½.

The fluctuations during the week have been from 26½@28¼, the lowest Saturday and the highest Monday, closing to-day at 26½ bid.

Linseed Oil stock was neglected during the greater part of the week, sales being reported on Monday and Thursday only. There was no news except as to the business doing, which was said to be exceptionally good, though at lower prices for oil. The last sale reported on Thursday was at 19.

The fluctuations during the week have been from 19@19, the lowest Monday and the highest Thursday, closing to-day at 16 bid.

Va.-Car. Chemical stock showed a decided tendency to weaken, though the cause was not clear. The offerings at times were free, and tended to cause a feeling that sellers had information which induced this course, though this was denied. The last sale on Friday was at 66.

The fluctuations during the week have been from 65@67¼, the lowest Saturday and the highest Monday, closing to-day at 65 bid.

Corn Products stock varied throughout the week between 31¼@32, the variations being attributed to trading influences in the absence of news of any kind. The last sale on Friday was at 31¼.

INTEREST ON DEPOSITS.

THE NEW JERSEY TITLE GUARANTEE AND TRUST COMPANY

CAPITAL, - - - - $200.000.00
UNDIVIDED PROFITS, - - 650.000.00

Receives Deposits Subject to Check and Allows Interest on Daily Balances, Issues Time and Demand Certificates of Deposits Bearing Interest.

Important to Renters of Safe Deposit Boxes in New York

"THE LEGACY AND INHERITANCE TAX LAW," as enacted under the laws of the State of New York, section 9, chapter 399, of 1892, authorizes city or county officials to examine the contents of Safe Deposit Boxes at the death of renter, in order to determine the amount of tax to be levied on the estate

Boxes to Rent from $5 to $300 per Annum.

The New Jersey Title Guarantee and Trust Company, 83 & 85 MONTGOMERY ST., JERSEY CITY, N. J

Pulverizing Machinery.

The demand for machinery that will reduce various kinds of material to an exceedingly fine powder has become very large, and is constantly upon the increase. The great variety of uses to which such machines are put and the even greater variation in the characteristics of the material to be reduced has resulted in the development of widely different machines for the production of what are apparently the same results, namely, an impalpable powder. That this is so will be evident from even a momentary consideration of the conditions surrounding the pulverization of such materials as tobacco for the formation of snuff, Portland cement, phosphate rock and wheat. Different as these specimen articles may be in their chemical and physical properties, when they have been passed through a pulverizer properly adapted to the special work in hand, they are one and all an impalpable powder without one trace of grit to mark their previous condition.

However, though the designs and details of the many machines, from which a choice is offered may not resemble each other, the principles of construction and operation upon which they are based are comparatively few. For convenience of reference, they may be divided into five classes, as follows: Attrition machines, burr stone, roller mills, beaters and tumblers.

The attrition machine, or rather the principle upon which it works, is undoubtedly the oldest, as it is certainly the most primitive. It is that of the mortar and pestle, of which the hand has been the main motive power for ages. Coming down to us from prehistoric times, it differs but little to-day from its first inception either in form or capacity of output. It is well adapted for the production of small quantities of powdered material, and does its work by the disintegration of that material between two hard surfaces that

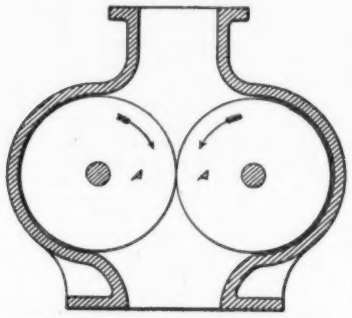

FIG. 1.—ROLLER CRUSHING MILL.

are brought together with more or less pressure. A few small power-driven machines have been made to work along these lines, but their output is too small to compete with the commercial demands that are made upon the modern machine, so that their use and introduction has been limited to the pulverization of materials for which there is an exceedingly small demand, such as some very expensive drugs or for laboratory experiments. The most successful of these machines are those in which the twist and roll of the pestle in the hands of a skillful manipulator is closely imitated

Following upon the mortar and pestle or attrition machine comes the burr stone, whose first application for grinding purposes dates back to remote antiquity. The burr-stone mill, as all know, consists of two stones set horizontally and made to revolve, with the product to be ground passing between them. The best stones come from the upper fresh water beds of the Paris basin, and belong to the Eocene age. These are known as the French burr stones. They are of a whitish cream color, and are coarse, flinty and cavernous like coarse chalcedory. It is this cellular structure that renders them especially suited for millstones. Other stones of the same character are found in South America and in Ohio and Washington, in the United States, but these belong to much older rocks than those of the Paris basin.

A substitute for the burr stone has been placed upon the market in the form of a steel wheel, but it has not proven an altogether satisfactory one. The burr stone, after holding its own for centuries and being practically the only method in use among the civilized nations of the earth, has at last been obliged to yield to a new type of mill in which a roller, running over the material, serves to crush it to the desired degree of fineness.

It is not intended to deal with the flour milling machinery, for which space is not available within the scope of this article, but merely to take up some of the more prominent types of successful pulverizing machines that are used for hard as well as soft materials.

The type which has perhaps received the greatest amount of attention from designers is the roller mill, and this has been offered in a great variety of forms. These may further be divided into two classes: those that merely crush the material in a single passage and those, which by repeatedly rolling over it, reduce it to an impalpable powder.

Of the first class, the mill in its simplest form is shown in Fig. 1. It consists of two exceedingly heavy rollers, AA, that are mounted on shafts of a corresponding diameter and made to revolve in the direction indicated by the arrow. Material fed in at the top is drawn between these rollers and crushed to the desired degree of fineness. It is necessary that the rollers should be pressed together and held with great rigidity, for any springing on the part of the rolls themselves or their shafts will result in a corresponding coarsening of the product. The capacity of such mills is rather high, but they are not the best adapted for producing very fine work. In fact, two or three or even more passages through a series of such rolls are required in some cases.

Here, as in all of the other roller mills, it is necessary that the material should be reduced to a certain degree of fineness before it is fed into the machine itself. As to just how fine this should be depends on the character of the material, the machine, the fineness of the desired output and the quantity to be produced per hour. Thus, a very hard material like quartz should be crushed into a finer condition than cement rock. Again, the finer the crushing the greater the output of the pulverizer, for it is thereby saved just so much extra work; and, finally, the coarser the grade of the output the greater the amount of the same.

This prior preparation of the material is usually done, in the case of rock and similar material, by crushers set to produce the necessary degree of fineness for the pulverizer feed.

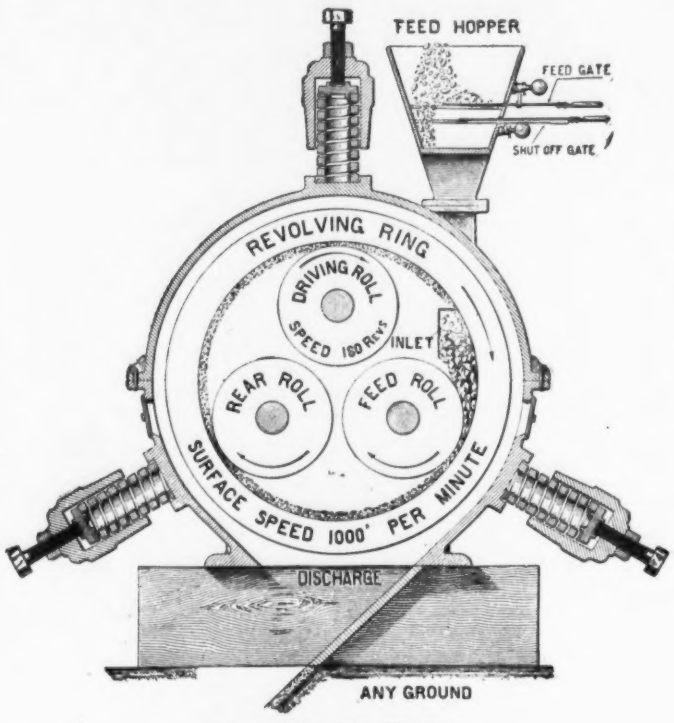

FIG. 2.—KENT ROLLER MILL.

The favorite method of construction of pulverizers of this class is to provide one, two or more rollers that are made to travel over the inner surface of a horizontal ring, and thus crush and grind the material that is thrown up on this path. This process naturally requires that the same material should be repeatedly passed beneath the roller, that the latter should run at a high speed and be so flexible in its adjustment that any large lumps failing in its way will not put an undue stress upon it or its supports.

This is what is invariably done in all mills of this class. The roller is held out against the ring with a pressure sufficient to crush the material and still be capable of yielding to any inequalities in its track due to the accumulation of material or the obstruction of large pieces. In order to show how this is accomplished a number of mills will be described in detail.

Of the various types of roller mills some operate with rollers traveling over a ring and others with the ring traveling over the rollers. Of the latter the Kent mill is a good example.

The construction of this mill is shown in Fig 2. From this it will be seen that there is a large revolving ring carried upon three rollers set at an angle of 120 degs. from each other. Power is applied to the upper one, and its frictional resistance against the inner face of the ring propels the latter, and this, in turn, drives the two lower rolls. The tension or pressure of these rolls against the rings is obtained by means of the springs that are set outside the casing. These springs have a bearing against a yoke extending across the case and drawing on the boxes carrying the ends of the roller shafts. By making the inner face of the ring concave with a corresponding convexity to the rolls, the former is not only itself held in place, but there is a tendency to retain the material to be ground in position.

The feed comes down through a hopper on top of the casing, as shown, and is thence carried beneath the curvature of the ring and dropped over the top of the feed roll. It then passes beneath the several rolls, and, making an indeterminate number of turns with the ring, it is finally delivered at the discharge in a fine condition.

It will be seen from this that that fundamental requisite of a roller mill, the adjustability of the rolls to pass obstructions, is met, in this case, by the springs holding all of the working parts in position. Any large or hard material passing beneath any one of the rolls produces a compression of its spring, and a corresponding thrust against the ring, which carries the stress to the other two rolls, compressing their springs and thus holding the moving parts in equilibrium at all times. In this mill there are no unbalanced parts and it runs very smoothly and quietly.

Of the mills using a traveling roller, the Griffin is one of the best known. The motion is rather peculiar, but the flexibility is very great. The mill is shown in vertical section in Fig. 3. It consists, essentially, of a heavy frame set upon a concrete base and holding within the legs a casing containing the ring 70, against which the pulverization is effected. At the top there is a heavy pulley 17, placed on a seat protected from the dust and carrying a bearing with a universal joint. This is in the form of a pair of trunnions, which are themselves set. in ball supports. This supports the vertical shaft 1, to the lower end of which the roller 31, is rigidly fastened. The latter is beveled so as to have a proper bearing for the whole width of its face against the ring 70.

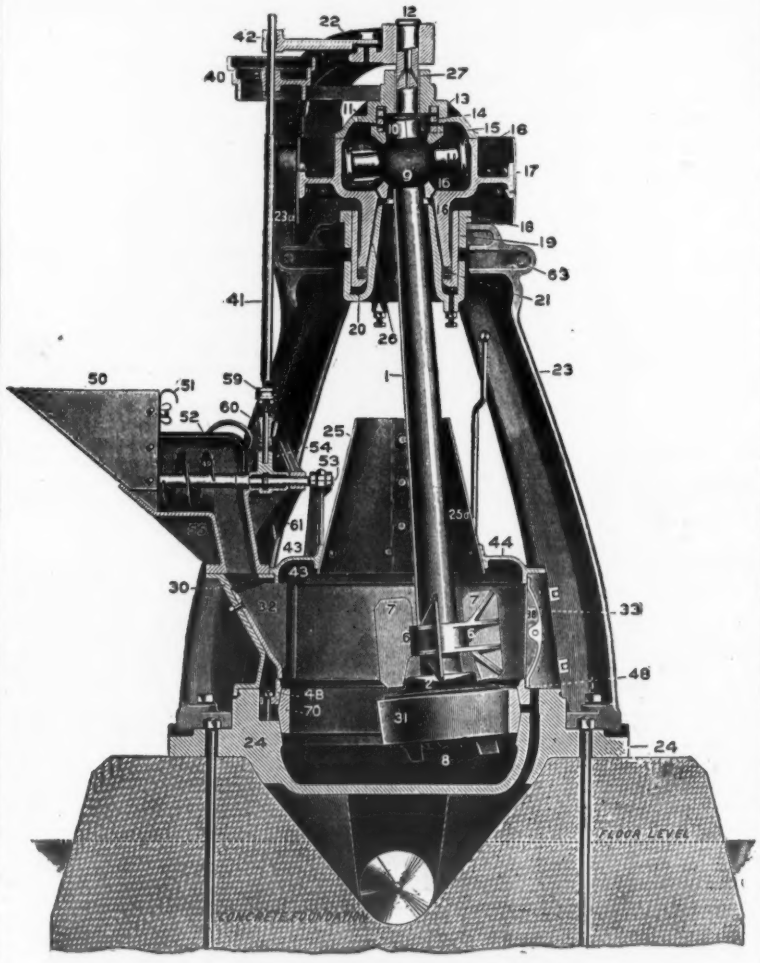

FIG. 3.—VERTICAL SECTION OF GRIFFIN MILL.

When at rest, the shaft 1 hangs vertically in the center of the mill, and the roller 31 is not in contact with the ring. On moving the pulley 17, the roller with its shaft is turned, and, owing to the fact that it is not perfectly balanced, it swings out of the center line and describes circles of constantly-increasing diameter, until it at last comes into contact with the ring. As soon as this occurs the roll begins to travel around the ring in the opposite direction to that of the revolution of the pulley. This apparently backward motion is accelerated by the conditions of its generation, and depends in its speed, on the relative diameters of the roller and the ring.

The material is fed in at the hopper 50, located at the side of the mill, and drops down between the roll and the ring. Fixed to the shaft above the roller are a number of fan blades by which the light material is caught up

and forced through the screens, whence it drops down through the side passage to a chamber beneath the machine, from which it is removed by a conveyor. The action of the fans furthermore tends to reduce the amount of dust escaping from the machine, by the fact that the air forced out through the screens with the material is drawn in through the opening at the top of the shield 25. This maintains a constant in-draft that prevents the escape of the pulverized material.

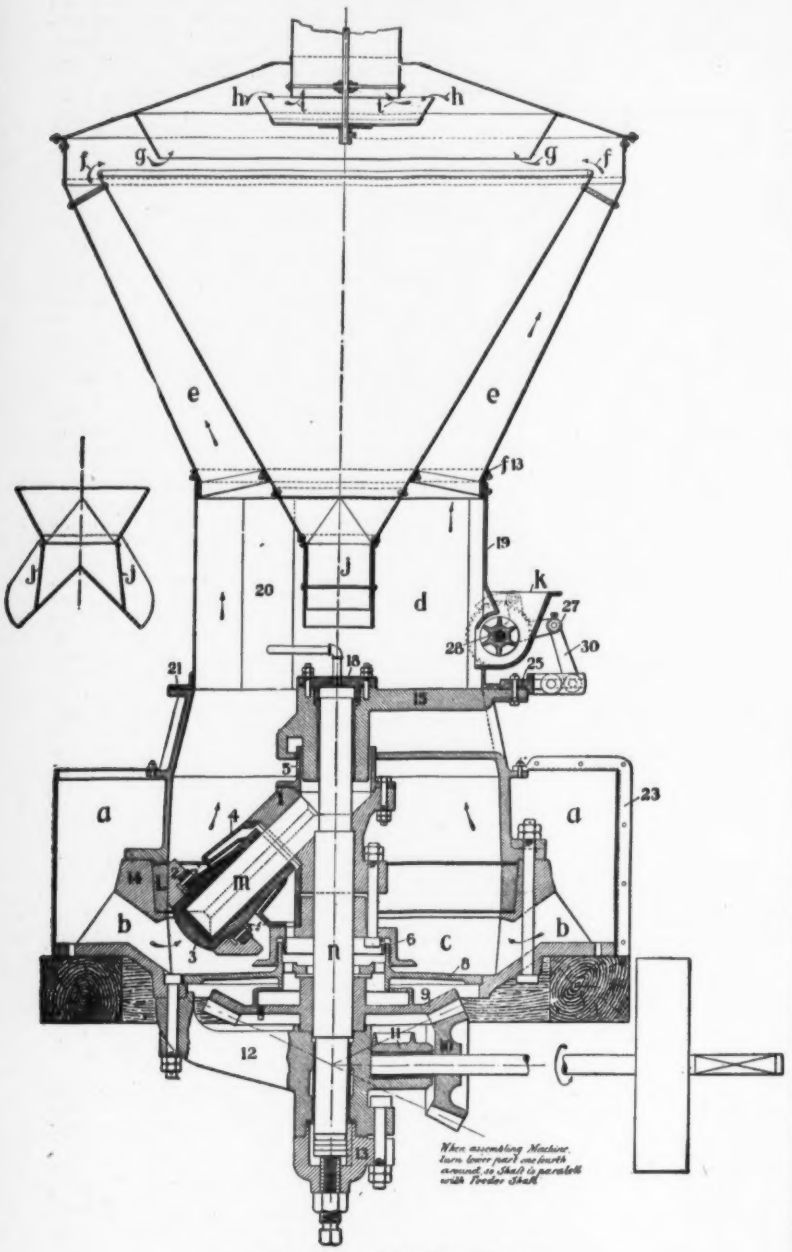

FIG. 4.—RAYMOND ROLLER MILL.

Any particles that are caught up by the fans and which are too large to pass through the screen, drop back upon the ring for a further reduction. The mill may be made to work either for wet or dry grinding. With the former process the water is introduced with the feed, and when the mill is running, a whirling or rotary motion is imparted to the water and material, which carries the pulp up and against the screens, making the entire surface thereof available and thus increasing the speed of delivery.

There is also a type of suspended roller pulverizer which is somewhat similar in that the rolls are suspended for communicating motion to the rollers. The shaft itself is carried by a shoulder at the top, and runs in two vertical bearings, by which the pull of the belt is taken. Of course, the stress due to the driving of the rollers must be carried by this shaft, but it is freed from the jarring arising from the inequalities of the surface on the ring.

The lower end of the central shaft carries a disk upon which the bearings for the roller shafts are suspended. These shafts are also carried by collars near their upper extremities and are free to swing out against the ring. There is, however, no universality to this motion. The shafts are themselves carried around by the disk from which they are suspended, and as the rollers swing out under the influence of centrifugal force they are pressed against the ring and are rotated by the frictional resistance thus set up. They roll around the ring in the same way as the mill previously described. The pressure of the roller upon the ring depends upon the speed at which it is run and is that of the centrifugal action so set up. The feed comes in at the top and the material drops down between the rolls and the ring.

When the pulverization has been completed the fine stuff is caught up by the centrifugal action and driven out through the screens of the proper mesh. That which is too coarse to pass drops back on the ring for a further reduction.

Still another form of roller mill is shown in Fig. 4. This is known as the Raymond mill and combines the centrifugal action of the suspended rollers with the pressure due to gravity. The mill is entirely different from any that have thus far been described. The ring L against which the pulverization is effected is set well up in the machine. The roller 2 is carried on a sleeve which turns about a rigid shaft m. The latter is keyed to a head 1, fastened to the vertical shaft n. As the latter is revolved the inclined shafts m are swung around the vertical axis of the machine, carrying the rollers with them. These are free to slip up and down upon the shaft m, and thus are wedged tightly against the ring. This pressure is further increased, when the machine is in motion, by the centrifugal action. The material to be pulverized is fed in at the hopper k and falls down to the bottom of the casing.

Attached to the shaft n and set in between the rollers are plows that catch up the coarse material from the bottom and throw it against the ring in front of the rollers. Here the pulverization is done and the material again falls to the bottom.

The manufacturers invariably recommend the use of an air blast for the removal of the finished product rather than screens, and the machine is designed with this method in view. Air is forced in at the air belt a and from it passes through the passages bb to a point within the machine below the ring. As the current rises to the upper portion of the casing it catches and carries with it the fine particles as they are falling from the rolls. These particles are carried up through the outer annular space of the separator e and over the edge of the top of the inner portion at f. Here the air enters a much larger chamber, and its velocity is greatly diminished, so that the heavier particles can no longer be held in suspension and they fall to the bottom at j. At this point there are two doors opening automatically under the weight of an accumulation of material and allowing it to fall through and back into the mill beneath.

FIG. 6.—STROUD CYCLONE DISINTEGRATOR.

Meanwhile the lighter particles are still held in suspension and are carried out at the exhaust at the top where the velocity of the air is again increased by the contraction of the passage so that no further deposition takes place until the settling chamber is reached. With such an apparatus and with a proper adjustment of the air currents, any degree of fineness can be obtained in the finished product. In order to prevent the escape of this fine material, the whole cycle is closed so that the same air is used over and over again.

The roller mill is not, however, the best adapted for all classes of materials. There are certain soft substances such as tobacco, stalks and some of the minerals that are best handled by a beater pulverizer. Such a machine is exceedingly simple in construction, and one such is shown in Fig. 5. The operating mechanism consists of a shaft upon which a series of beaters are arranged as shown. These beaters consist of arms at the end of which there are blades set at opposite angles alternately. This shaft with its attachments is revolved at a high velocity, and the material is fed in at the top. As it falls down it is beaten first in one direction and then in another, so that it follows a zigzag path around the chamber. This rough treatment disintegrates and pulverizes it to the proper amount so that the finished product may be drawn off by a current for air separation in the form of an impalpable powder capable of passing through a screen of a very fine

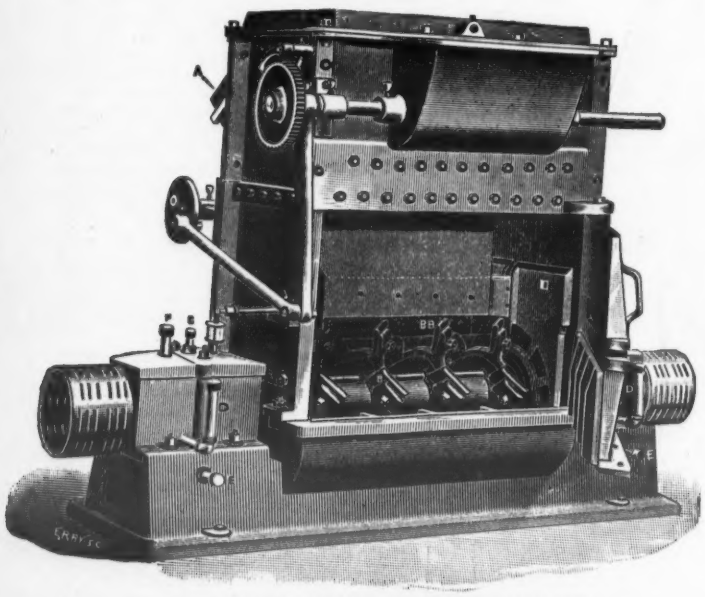

FIG. 5.—RAYMOND BEATER PULVERIZER.

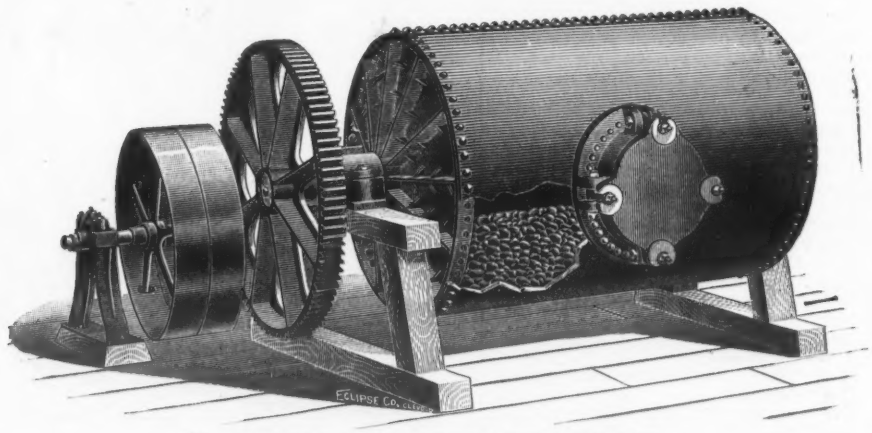

FIG. 7.—TRIUMPH PEBBLE PULVERIZING CYLINDER.

mesh dependent upon the velocity of the air current.

The whole action of this machine depends upon the high rate of revolution given to the beater blades. This mill like that shown in Fig. 4 is made by Raymond Bros.

Another beater mill working in a similar way is the Stroud cyclone mill. This is shown in Fig. 6. Here the beaters consist of blades of flat steel revolved at high speeds in a narrow chamber, whose walls are lined with serrated plates of hardened steel. The attrition of the material against the roughnesses that are presented tears it to pieces and reduces it to a condition suitable for removal by an air current. The speed of these machines must, as already stated, be very high running from 1,200 to 4,000 revolutions per minute, according to the size.

Finally, there is a form of pulverizer that is far simpler in construction than anything that has been described. It is shown in Fig. 7, and consists merely of a steel cylinder partially filled with Greenland pebbles and into which the material to be pulverized is placed. The cylinder is caused to revolve slowly, and the work is done by the tumbling about of the substance to be reduced with the hard pebble. The attrition thus produced pulverizes the material, and it may be removed in an impalpable condition by an air blast or by stopping the machine, putting a protected screen in the place of the cover and again running the machine until all of the material has ben sifted out.

No attempt has been made in these descriptions to deal with all of the machines upon the market, but merely to present the salient features of a few typical pulverizers that may be taken as representative of the various methods of doing the work.

In the selection of a machine for performing a certain definite piece of work, the material, the fineness desired in the output and the amount to be pulverized per hour must be taken into consideration. Certain machines will deliver a coarse grade of material at a high rate, but if compelled to work it down to a mesh of from one hundred to one hundred and fifty per inch they fall off so rapidly as to be practically unavailable for the service. In the removal of the product from the machine an air blast is probably the best all-around means of accomplishing this. The flow can be so regulated that only that grade desired in the output will be picked up and a uniformity can be obtained that is quite surprising to the unnitiated. In addition to this there is no difficulty in the wear and clogging that occurs with screens.

As for material and fineness almost anything can be pulverized on some one of the various classes of machines described, and the delivery can be varied from coarse granular particles to an impalpable powder passing a screen of from one hundred and fifty to two hundred meshes per inch.

The Texas Petroleum Fields.

BY ROBERT T. HILL.

The successful completion, January 10, 1901, by Capt. A. F. Lucas, of a well near Beaumont, Tex., whereby an enormous flow, estimated at 75,000 barrels a day, was obtained, opened a new oil-field in the United States, kindled a frenzy of exploitation and speculation, revolutionized the fuel industry of a large region, and brought gain to thousands of people.

Even to-day, it is impossible to cast up the present results or to prognosticate the future influence of this event. It has caused the revival of attention in other localities where oil had been suspected and exploitation for oil throughout the Texas region. It has attracted attention to the mineral resources of the Texas region, and created an interest in the geological conditions of that great State.

This State, which has increased in population and wealth, as recorded by every succeeding census, with leaps and bounds such as are exhibited by no other part of the Union, now stands fifth in population and first in productive wealth per capita. Its fields, pastures, forests, and mines teem with raw material. The whole enonomic evolution of the State has gravitated toward a focal point where these products were available for the coming of the kiln, the machine and the factory.

The only drawback to the prosperity of the State was the lack of an economic fuel, inferior coal costing an average of $5 per ton at the time of the Beaumont discovery. This prevented the successful operation of any one of the thousands of minor industries upon which other communities ordinarily depend for prosperity. As by a touch of magic, this great fuel supply burst forth in a single day, thanks to Captain Lucas, who, aided by the wise laws of the railway commission, placed at every quarry, clay-bank, sandpile, mine and mill, the cheapest and best of fuels.

With these factors in hand, who can even grasp the significance of the great industrial development which is to take place within that empire during the next decade? Who can conceive the countless wheels to be set in motion? Who can reckon the prospective increase in population, the municipal development, the opening of brickyards, factories, shops and mills? Never before in history has there been such a culmination; never again will such opportunities be presented for the man of energy as means are now presented in Texas.

THE LIMITATIONS OF GEOLOGICAL INTERPRETATION OF OIL PHENOMENA.

In endeavoring to interpret the geological occurrence of oil, the geologist is confronted by the fact that science has not yet solved the problem of its origin, which lies at the root of the subject.

Among the theories in this field are those of inorganic chemical origin, resulting from reaction of one mineral upon another; the generation of oil in living microsopic organisms, such as diatoms; and the generation of oil from the decomposition and deterioration of dead organic matter, animal or vegetal, preserved in the rocks. There are facts in nature which can be made to conform to either of these theories; but for the present we must consider oil as a material in the rocks, the origin of which is still unexplained.

Concerning this occurrence, we can only say that each field where it is discovered presents a peculiar group of data, some of which may, or may not, be presented in others. It is well known that certain strata, like shales, with large admixture of organic matter, are nearly always more or less bituminous, and are probably the locus of the original formation of oil from decomposition of the organic matter. On the other hand, the oil in commercial quantities is usually found in some adjacent bed, like an overlying, stratum of sand which forms a more porous receptacle. Where such shales and sands are in proximity, the oil is practically indigenous; and such occurrences may be termed sheet-oil. In other cases, oil is found in pockets, in strata which do not contain sufficient bituminous matter to justify the reference of its origin to them. Such occurrences may be termed pocket-oil.

Science has ascertained much concerning the underground circulation of water, but we know very little concerning the laws controlling the underground circulation of oil. The few elementary physical facts concerning the behavior of oil and water teach us some lessons. From the antithetic behavior of the water and the oil upon the surface, we can with safety presume that these substances will not act in an entirely harmonious manner underground. We know that oil will float upon water, and therefore that circulating underground waters, if ascending, may gather oil from places of its origin, and transport it and store it in remote underground reservoirs. On the other hand, oil differs from water in capacity for permeation and osmosis. Oil stored in a tightly sealed bottle will pass by osmosis through the glass more rapidly than water. The question of the underground migration of oil is one of the profound fields for future research.

The principal deductions from the world's experience concerning the occurrences of oil are:

(1) The chemical origin of oil is as yet unexplained.

(2) Oil may occur in stratified rocks of any age from the oldest Paleozoic (as in Pennsylvania) to the latest Tertiary (as in Texas).

(3) Oil usually occurs in terrigenous (land-derived) marine deposits, such as sands and clays, in which there is a mixture of organic matter, and is not common in rocks of deeper sea origin, such as many of the foraminiferal limestones, or igneous rocks.

(4) The circulation of oil in rocks is different from that of water.

(5) The structure or arrangement of the rocks influences the collection and storage of oil, and hence the knowledge of geological structure aids in the determination of favorable or unfavorable conditions for the underground storage of oil.

(6) Some underground bodies of oil are known to be stored in, or even to be derived from, definite strata. The trained geologist can indicate the underground extent ("embed") of such strata.

(7) Other underground oils are stored in favorable loci more or less remote from the strata in which they originated, and accumulated in folds or pockets, like water in a rubber blanket (the blanket being inverted).

The above facts indicate what the geologist can and cannot tell concerning oil-fields. The first thing he can do in the great region is to eliminate or cancel broad areas of unfavorable strata, leaving certain fields of probability and improbability. Within a determined field of probability it is impossible to predict the actual point where oil can be found. The cost and credit of developing the oil-field must always ultimately fall upon those who boldly risk labor and money upon what is largely a game of chance.

The practical geologist has to deal primarily with the stratigraphic location of oil, the deformations of strata favoring the collection of this oil in geological receptacles, and the laws of underground circulation of oil in the rocks.

Where a determined oil-field is underlaid by sheet-oil, the probabilities of success are greater, and the geologist can assist the practical man with some confidence. On the other hand, where the oil-field consists of pockets, no one knows as yet how to locate these pockets beneath the surface.

The oil-bearing strata of the Beaumont oils are entirely different from those of the Corsicana oil-field (where the oils are derived from the Upper Cretaceous strata); from the Indian Territory oil-fields (where the oils are derived from the Carboniferous strata); and from the oil-fields of Pennsylvania, Ohio and West Virginia (which receive their oil from the still older Paleozoic rocks, such as the Trenton).

The prospector in the Beaumont oil-field must be prepared to cast aside previous conceptions based upon the structure and age of the earlier-known oil-fields.

GEOGRAPHY OF THE TEXAS REGION.

In a recent paper the author presented an outline of the physiographic features of the Texas region, as shown on a map therewith, and defined its earliest primary natural subdivisions as a basis for more detailed discussion and differentiation of the various phenomena.

The Greater Texas region includes practically all the country east of the Rio Grande and south of the northern boundary of New Mexico. The area thus defined consists of a peculiar group of physiographic units, composed of mountains and plains belonging to the four greater natural provinces of the United States, to wit: the Cordilleran region, the Great Plain region, the Appalachian region, and the Atlantic Coastal Plain. The characteristic features of these regions as they extend into the State present local modifications. There are also in the central portion extensive stretches of country which have no counterpart elsewhere.

It is impossible to give here the details of the varied geographical features of this vast area, which includes nearly one-tenth (Texas proper embracing one-twelfth) of the present area of the United States. In another paper I showed the rapid evolution which the economic features of Texas have undergon in the past twenty years from the pastoral to the industrial conditions, and declared that the one great need of the State was an economic fuel. Almost coincident with the publication of that paper was the completion of the great oil-wells at Beaumont.

SEDIMENTARY ROCKS OF THE TEXAS REGION CONNECTED WITH THE OIL PROBLEM.

Most of the surface of Texas is formed of sedimentary rocks, igneous formations covering less area. There are also extensive formations composed of wind-blown debris, chemical precipitates, and upland drift.

The sedimentary rocks are alone pertinent to the present paper. They lie one above another in more or less orderly succession, and are of two general classes:—(1) Marine formation, originally laid down upon the marginal bottoms of the sea; (2) superficial formations, deposited upon the slopes of the land or at local deposition-levels, such as lakes, rivers or other bodies of water within the land-area.

The marine sedimentary rocks laid down on the sea bottoms are of all ages, from Cambrian to recent, with the possible exception of the Devonian. They aggregate about 25,000 feet in thickness. The strata vary in hardness; are tilted steeply in the mountainous areas, and nearly horizontal on the plains. They are of two general classes, differing in occurrence and importance:—

(1) An older or fundamental series of Paleozoic formations. The structural arrangement of these formations in anticlines and synclines is discordant with that of the later formations of the coastward slope. The series represent the remains of an ancient topography, which was base-leveled during Jurassic and Cretaceous time, prior to the invasion of the Cretaceous seas, which completely buried it with later sediments. These older rocks, except in the mountains, are now seen only where areas of the later strata have been worn away. In the structure of this group is written an interesting pre-Cretaceous history, involving the growth and decay of relief-features quite different in detail from those of the present time.

(2) Formations of the coastward slope from Cretaceous to recent age. Most of these rocks were once marginal deposits of the Gulf of Mexico, laid down when it extended much further inland than it does to-day; and they were elevated as the gulf receded from the Rocky Mountain front to its present position. All these strata now incline toward the sea. In some instances the inclination coincides with the surface-slope, while in others it is slightly greater.

The Paleozoic rocks may be divided into two groups—the earlier and the later Paleozoic. The first includes the Cambrian and Ordovician; the second, the Carboniferous and Permian, or Permo-Triassic. The same names characterize four primary lithologic subdivisions. Of these, the first two are usually more or less associated in geographic occurrence in limited areas, and by reason of their hardness produce allied features of topographic relief. The third and fourth, forming the surfaces of large areas, have each individual features.

The pre-Cambrian and older Paleozoic rocks are the foundations upon which all the other rocks were laid down, and are still, in the main, coverad by them. Their outcrops are exceptional and restricted in area; they occur in small districts in the Wichita Range of the Ouchita Mountain system, in some of the trans-Pecos Mountains, especially between the 31st and 32d parallels, and in a limited territory in the southern end of the Central Province, known as the Burnet country.

The Cambro-Silurian rocks are indurated clays, sandstones and limestones. They usually occur in geographic association with the pre-Cambrian and Carboniferous rocks, in the southern part of the Indian Territory and Central Texas.

The Carboniferous rocks are the chief formations of the Ouachita Mountains, the eastern border of the Central Province in Indian Territory and Texas, and certain mountains of trans-Pecos, Texas. The Permian, or Red Beds, prevail in the greater part of the Central Province and in the Pecos and Canadian valleys. The Carboniferous and Permian rocks produce somewhat allied but different topographic forms. The Carboniferous (east of the Pecos), largely made up of soft, impure shales, alternating with harder, coarse, brown sandstones and conglomerates, produce ridge-like mountains and a broken belt of country along the eastern margin of the Central Province, called "flats." The Permian Red Beds, some 7,000 feet in thickness, consist largely of unindurated arenaceous clays, with only a few hard strata. They weather into extensinve flat regions with occasional scarp-lines attended by "bad-land" slopes. They occupy the western and greater part of the Central Province, extend beneath the Plateau of the Plains, and outcrop in Pecos Valley against the eastern front of the Cordilleras.

The existence of the early Mesozoic (Triassic) is doubtful, although possible. Rocks referred to this period overlie the Permian along the western part of the Central Province, and appear in small areas around the border of the Plateau of the Plains, but are not pertinent to our present subject. Jurassic limestone strata of the Mexican type have been found in only a limited area in the basin ranges of the interior desert, west of the Cordilleran front, and are not known on the Atlanctic Slope or in the series of the Texas Coastal Plain.

The Coastward Gulf Slope consists of vast sheets of sea-made sediments, from Cretaceous to Pleistocene Age, inclusive, and of aggradational deposits of upland wash, and stream and lacustral alluvium of Tertiary and later age, all of which, except the lower Cretaceous, are mostly unconsolidated terranes of clay, sand, marl and loam. Of this later group, the marine Cretaceous, Tertiary and Pleistocene rocks are the chief formations, especially

east and south of the Central Province. These rocks occur in belts subparallel to the coast.

The Cretaceous rocks are divisible into older or lower and a newer or upper series. They occur along the western border of the Coastward Slope Plain. The older formations consist of hard limestones alternating with clays, and are underlaid by sands; they produce dip plains, cut plains, and low scarps. The Upper Cretaceous strata consist largely of unindurated clay marls, with a few indurated scarp-making strata all underlaid by sands, and weathering into low, undulating areas.

These Cretaceous strata, underlying the Coastal Plain of Texas, in the Black and Grand Prairie countries, have been minutely described by the writer in many papers, especially Part VII. of the Twenty-first Annual Report of the Director of the United States Geological Survey. These consist of nearly 4,000 feet of shales and sands and limestones; probably one-half of the section is made up of marine near-shore clays and sands, and the remainder of deeper water limestones. The Cretaceous strata constitute the floor or foundation upon which the Tertiary and Pleistocene sediments were deposited and most probably underlie the whole coastal plain of Texas at great depth, their base being not less than 10,000 feet deep along the coast at Galveston.

For present purposes the Tertiary may be divided into two great groups, a lower and an upper, which may be termed the Eocene and Neocene respectively.

The Eocene strata consists of a series of unconsolidated sands and clays, accompanied by fossil shells and beds of lignite, and about 3,000 feet, more or less, in thickness. They have been considerably studied in a manner to make known the stratigraphy and character; but the nomenclature and classification are still susceptible of refinement. The writer prefers, for the present, to divide the rocks of the epoch into two series. For the older, including all the rocks from the base to the Nacogdoches oil-formation, he has already used the name Camden series. For the rocks above the horizon, the term Angelina may be used. While paleontologists are disagreed in their determination, these names are good for tentative use.

The Camden series include many beds of clays, sand and lignite (underlying the East Texas timber belt), for which various names have been proposed.

The Angelina series, above the so-called marine beds of the Camden series, which are the first classified deposits immediately north of the Beaumont oil field, have been described by Kennedy, in descending order, as follows:—

(1) The Lufkin deposits (Yegua), made up chiefly of dark-blue gypseous clays, and gray sands containing quantities of saline matter. These beds also contain lignite, in many places, in beds or deposits of considerable extent.

(2) The Fayette sands, made up of soft sandstones, light-colored clays, sandy clays, and sands with occasional remains of vegetable life. These deposits approach in texture and mode of occurrence the typical Grand Gulf formations, as described by Hilgard, in Mississippi, and by Hopkins, in Louisiana. The plant remains, such as palms, etc., are also in close correspondence.

(3) The Fleming beds (Frio clays) consist of heavy deposits of clays of various colors, some of them containing concretions of lime and gray sands. The plaint remains of these sands are chiefly wood, and often occur in large pieces and considerable quantities. The Frio clays are considered Eocene in Kennedy's later publications.

The sections made by Kennedy give the general character and sequence of the formations along a general section from Nacogdoches county to the Gulf.

The thickness of the later Eocene (Angelina series) sections, as given by Kennedy, aggregates 1,407 feet.

Above the Frio clays of supposed Eocene Age follows a series of unconsolidated sands and clays of Neocene, Pleistocene and Recent Ages, which constitute the formation of the Coast Prairie. These will be further discussed on a succeeding page, under the head of the X beds.

Summarized, the post-Carboniferous strata beneath the Central Plain of Texas, and which by dip should be beneath the Coast Prairie, are as follows:—

Post-Eocene	1,000 to 2,500
Eocene	3,500
Upper Cretaceous	2,000
Lower Cretaceous	2,000
Total	10,000

STRUCTURE OF THE RUDIMENTARY ROCK-SHEETS.

In general, the Paleozoic rocks of the northern border of the Ouachita Mountains of Indian Territory and the mountains of trans-Pecos, Texas, are greatly tilted as a result of the Appalachian revolution. Between the mountains the Paleozoic rocks in Texas occupy a great synclinal basin, dipping westward from their exposed eastern outcrops and eastward from their exposed western outcrops.

Over this synclinal basin, after a long land-period, the rocks of the Coastal Plain, from the base of the Cretaceous upward, were laid down unconformably. This unconformity is the most radical structural feature in the whole Texas sequence. It is not necessary for our present purpose to go further into the details of the structure of the Paleozoic rocks.

As a whole, these Cretaceous and Tertiary rock sheets of the Texas Coastal Plain may be collectively discussed as the systems of the coastward incline, and their structure is very simple, the strata being characterized by their unconsolidated nature, their regularity of sequence, simplicity of arrangement, and gentle dip coastward.

One who begins at the coast and travels across this region along any line radial to the coast, will find that while the surface constantly ascends above the level of the sea at a slight gradient, it presents a descending geologic sequence in successive belts of country, each with its peculiar soil, rock and flora, due to the differences in the rock sheets of which it is formed. The outcrops of the various strata, owing to their physical and chemical composition, have weathered into diverse characters of country—forest and prairie, broken or level—exactly as the substructure permits.

There are few, if any, breaks in the continuity of deposition of the 10,000 feet of sediments, of Cretaceous and later age, constituting the coastward outline. One of these apparently occurred at the middle of the Cretaceous, but without any special stratigraphic discordance. Another is supposed to have taken place at the close of the Cretaceous, but is not proved.

According to Kennedy, at the close of the period occupied by the deposition of the last of the marine beds of the Eeocene, a break of considerable extent occurred: and entensive erosion, implying elevation, appears to have taken place prior to the deposition of the succeeding deposits. Strong proof of this erosion can be seen almost anywhere along the line of contact where the succeeding denudation has carried off the overlying mantle of sand and gravel of the Angelina series. He says that this want of conformity is everywhere visible, and the clays and sands of the Grand Gulf frequently extend in long, narrow strips for several miles into the region occupied by the Eocene marine formations; and at other places are found abutting bold headlands made up of the deposits of that age. Kennedy also informs the writer that there is a similar break at the top of the Angelina series.

So far as known, there are no strong folds or basins in the strata of the Coastal Plain, such as exist in the Ohio and Pennsylvania oil fields, although there are probably some very low anticlines or swells, which materially bear upon the storage of the oil in the reservoirs or oil containing strata. In general, the structure of the Coastal Plain is monotonously monoclinal.

The formations of the Coastal Plain are all marginal sediments of the Gulf of Mexico; and the present tilt coastward may be considered the algebraic sum of several periods of elevation and subsidence since the beginning of Cretaceous time, the net result of which is a sinking of over 10,000 feet at the present coast-line.

It is well known that in the epochs from the Pliocene to the present there have been several movements of elevation and subsidence, during which the shore-line of the Gulf of Mexico migrated back and forth. At times this shore-line was far inward from its present site, while at other times it may have been considerably seaward.

It is also probable that the stress resulting from the vertical movements of these strata caused faults, some of which are already known to have taken place along the western margin of the Coastal Plain.

OIL FIELDS OF THE TEXAS REGION.

While the phenomena of the Beaumont field have attracted great attention, many are not aware of the fact that in the State of Texas there are several other oil fields (productive or prospective) entirely distinct from the Beaumont field, and from one another, in geological and geographical conditions. One of these has been productive for many years, while the others may some day give profitable returns.

One of these fields is already a producer of a high-grade illuminating oil, supplying nearly 1,000,000 barrels per year of oil as good as that of the Washington County (Pa.) field. There are also many localities where bitumen occurs as asphaltum.

The typical oil and asphaltum horizons of Texas are as follows:—

The Beaumont.
Nacogdoches.
Corsicana-San Antonio (Uvalde asphalt).
The St. Jo (asphalt).
The Brownwood-Henrietta.
The Trans-Pecos.
The Buckhorn (asphalt).

Of these, one asphalt field is found in the Ordovician rocks; two oil fields (the Brownwood-Henrietta and the Trans-Pecos) in the older (Carboniferous) rocks of the Coastal Plain; and the others in the Cretaceous and Tertiary. I shall briefly describe each of these fields in ascending stratigraphic order, which also corresponds to their relative importance.

In the Southern Indian Territory there are, in Ordovician and Carboniferous formations, many asphalt springs and bituminous rocks which show the presence of a great amount of bituminous material. These asphaltic deposits have been recently described in detail by the United States Geological Survery, in a paper entitled "The Asphalt and Bituminous Rock Deposits of the United States," by George H. Eldridge.

THE PECOS OIL FIELD.

In Reeves, Pecos and El Paso Counties, Texas, and in Eddy, Otero and Chaves Counties, of Southeastern New Mexico, there is a prospective field in which many "seeps" have been found, and oil in small quantities has been struck in wells. This region lies immediately west of the Pecos River, and extends north of the Southern Pacific Railroad, far into Southern New Mexico, and adjacent to the eastern slope of the Guadaloupe Mountain uplift.

The geological series seems to have, primarily, a great thickness of indurated Carboniferous limestone at the base; then a series of sands and bituminous shales; then another vast thickness of Upper Carboniferous and Permian limestones; then shales and clays of Permian or Triassic Age; then the basement-sands and limestones of the Comanche Cretaceous; the whole being largely obscured toward the Pecos Valley by large quantities of wash and desert debris. The geological structure consists of a long monoclinal uplift dipping, from the western crest of the Guadaloupe-Sacramento Range and the Comanche Range, eastward toward the Pecos river. This monocline is waved by numerous secondary anticlines and synclines, and steep faults to the west. By reason of the ease with which the many low secondary anticlines and synclines can be made out, this structure is apparently more propitious for the location and extraction of oil than that of any other Texas field.

Most of this area lies upon the eastern slope of the monoclinal mountains of the Comanche and Guadaloupe-Sacramento range. A few oil indications have been found farther west, in the Salt Basin flat.

Within the area mentioned, oil, asphaltum and sulphur have been encountered at numerous places in wells or springs, and upon the surface; and while the region has not yet been minutely studied, there is every indication that by scientific study and exploration it can be developed into an oil field. Unfortunately, the only drawback, up to date, is the fact that the oil thus far encountered is of a very inferior quality, containing, as shown by Professor Phillips, a residue of 45 per cent. of asphaltic material and only about 25 per cent. of all grades of illuminants.

THE HENRIETTA-BROWNWOOD FIELD.

In this field, coincident with the Carboniferous outcrops in northern central Texas and the southern Indian Territory, numerous finds of oil have been made in small quantities, notably at Henrietta, Clay county, and in Brown and Coleman counties.

These Carboniferous formations are of great thickness (over 7,000 feet in Texas), and apparently contain many oil-bearing horizons. They also furnish some of the maltha springs of the Chickasaw Nation in the Indian Territory, and the oil and gas of the northern Indian Territory and Kansas. No oil in commercial qualities has yet been found in this field; but the quality of that hitherto found has been good. Exploitation is proceeding rapidly.

BITUMINOUS HORIZONS IN THE BASE OF THE CRETACEOUS.

The basement beds of the Comanche series of Texas and the southern Indian Territory are bituminous in several places, notably between Emmet and Caddo, I. T.; at Matubby Springs, about 5 miles northwest of Caddo; at Oakland, 16 miles southwest of Emmet; and at Marietta. At these localities the basement sand of the Cretaceous is impregnated horizontally. Crossing Red river to the southward, rich bituminous impregnations are similarly found in the basement sands near St. Jo, Montague county. Some 200 miles further south, in Burnet county, asphalt is again found in the vicinity of the town of Burnet, impregnating small breccia at the base of the Cretaceous.

There are several minor beds of shale and clay in the Cretaceous, which have furnished traces of petroleum and asphalt. A mile or two west of Austin, a little petroleum was found in the Del Rio clays. Traces of petroleum have frequently been found in the Eagle Ford shales, notably at Watter's Station, north of Austin, and in the northwest in Grayson county, on Red river.

THE CORSICANA OIL FIELD.

Since 1891 illuminating oil has been produced in the vicinity of Corsicana, where the Standard Oil Company has had a refinery. In 1900, the production of this district was 829,560 barrels. The oil is of fine quality, analogous to that of Washington county (Pa.) field, and has a paraffine base. The wells are not gushers, but are pumped from depths averaging about 1,100 feet.

Unlike the oil of the Beaumont field, that of Corsicana is distinctly a sheet oil; that is, occurs in a definite geological stratum, namely, a horizon in the bituminous sandy clay shales of the Navarro beds, of the upper portion of the Gulf series of the Cretaceous. The geological position is closely near that of the Florence and Boulder oil fields of Colorado.

An interesting feature of the Corsicana field is the fact that the Upper Cretaceous strata from which the oils are derived contain at least two distinct oil bearing horizons:—the uppermost has an asphaltum base, while the lower is of a paraffine nature. The upper bed is encountered at Powell, about twenty miles east of Corsicana; and I estimate that it is from 500 to 1,000 feet above the lower, which supplies the Corsicana wells.

These strata extend, with very slight variation, completely across Texas, from near Boston on Red River to near Eagle Pass, on the Rio Grande, in a curved line 750 miles long. An oil asphaltum has been found in them at several places, notably, a trace in the well at Bremond; a trace in Eastern Travis county; near Elgin, near Lytton, in Caldwell county; a few miles east of San Antonio, and on the Sabinal, in Medina county. The asphaltum beds of Uvalde and Kinney counties are derived from practically the same strata. It is the writer's opinion that when the continuity of this bituminous formation across the State has been fully appreciated and exploited in a scientific manner, many productive spots, similar to the Corsicana basis, may be found.

THE NACOGDOCHES OIL FIELD.

A number of years ago oil was struck at shallow depths in wells in Southern Nacogdoches county, about 100 miles west of north from Beaumont. According to the studies of various geologists, the horizon of this oil field is near the top of the Claiborne Eocene of the Tertiary.

A fine-grained quartz-sand, saturated with oil, which on the outcrop is a semi-asphalt, is apparently the source of the oil. It lies immediately below a green horizon, the outcrop of which is easily traceable by its blood-red soil, a product of the oxidation of glauconite.

Since the discovery of oil at Beaumont, renewed interest has been awakened in Nacogdoches, and several wells are being drilled.

At many other localities throughout the outcrop of the Eocene Tertiary of Texas, traces of oil have been found. Much interest is now shown in the vicinity of Sutherland Sprinks, Wilson county. A good oil is also reported fourteen miles south of Campbellton, near the junction of Atascosa, McMullen and Live Oak counties.

(To be continued.)

Parties desiring to be brought in contact with concerns who offer bargains in machinery are respectfully referred to page 27 of this issue.

PETROLEUM MARKET.

Saturday Noon, Nov. 8, 1902.

The field reports for the month of October came as a surprise to many who had predicted a large increase in the amount of new development work as a result of the higher prices being paid for the product. The fact that a smaller number of wells were completed than during the month preceding was also unexpected and the showing was regarded as decidedly bullish and fully warranting the expectation of further advances in price. The belief is now gaining ground that it will be impossible to increase the production of the older fields to an extent which will end the drain on stocks above ground and that the decrease will continue. This now appears to be the general belief among operators in the fields, but sudden increases in production have occurred in the past after long continued decrease and the possibility of finding new pools of magnitude still remains, but, of course, as the producing areas have been extended and much unproductive territory tested the probability becomes less favorable and, as is claimed, is now a bare possibility. The reports from the fields during the past week show no improvement, although one well has been reported showing an initial production of 700 bbls. per day, and several ranging from 100 to 300 bbls., but the large majority have been small affairs, many of which would be abandoned were the price of the product much below the dollar mark. At the present price even a 10 bbl. well proves profitable, and consequently the search for oil goes on in sections where small wells only may be expected. The percentage of dry holes continues large, and latterly these have been discouragingly frequent in sections where fair results should have rewarded the efforts of the drillers. The consumption of fuel oil is increasing as rapidly as the producers in Texas can guarantee a steady supply and the facilities are being improved as rapidly as possible, transportation facilities improved and storage facilities provided at numerous points.

Refined and Products.

There has been an absence of demand for refined in barrels for export, but the requirements have shown no change and engagements for shipment in bulk continue, varying from week to week according to the position of the tank fleet. The advance in the price has as yet had no effect on the demand. The engagements during the past week aggregate about 200,000 bbls., all for shipment in bulk. The price for barreled oil was advanced on Wednesday to 7.55c. for New York loading, and to 7.50c. for Philadelphia loading. The principal foreign markets are firmer. Quotations to-day by cable were: Antwerp, 19¼f.; Bremen, 6.35m.; London, 5⅜d.; and Liverpool, 6@6⅛d. Freight rates are strong at 2s.@2s. 3d., hence to London, and 2s. 3d.@3s. 3d. to Continental ports, as to port and vessel. Home trade lots have been in active request, and are firm on the basis of 9c. for 100 deg. water white from tanks and 11½c. in barrels.

Cases for export have been in light request and sales of about 100,000 are reported. The price of plain tops has advanced to 8.85c. Freight rates are firm. Nominal rates for large vessels are: For Amoy, 20@21c.; Calcutta, 10@11c.; Colombo, 20@21c.; Java, 15½@16½c.; Penang, 17@18c.; Hong Kong, 15@17c.; Rangoon, 20@21c.; Saigon, 16@17c.; Shanghai, 17½@18c.; Singapore, 18@19c.; and Yokohama, 16@17c.

Crude for export has been in good request, and sales of about 60,000 barrels are reported. Washington crude is quoted at 7.55c. in barrels. Cases for export have not been in request, and no sales are reported.

Crude naphtha has been steady at 9.05c. For export no sales have been reported.

Closing Quotations.

CRUDE.

National Tran. certificates, ℔ bbl.	$1.36 @1.37
Washington crude, in bbls., ℔ gal.	7.55
Washing crude, in bulk	5.00
Residuum, bbls., for export	6 @ 6¾

CRUDE AT THE WELLS.

The following are the prices paid by the pipe lines for crude as delivered from the wells:—

	1902.	1901.
Tiona ℔ bbl.	$1.51	$1.45
Pennsylvania	1.36	1.30
Corning	1.19	1.13
New Castle	1.11	1.05
Whitehouse	1.06	1.00
North Lima	99	95
South Lima	94	89
Indiana	94	89
Somerset	83	78
Lacy	83	78

Canadian Oil:—

Petrolia	1.87	—
Oil Springs, less pipeage	1.94	—

REFINED—FOR EXPORT.

Cargo lots for export ℔ gal.	—	@7.55
In bulk	—	@5.00
Philadelphia loading	—	@7.50

REFINED—JOBBING LOTS.

In barrels, pkgs. included.

120 fire test, S. W. ℔ gal.	10¼@	10½
130 fire test, S. W.	10½@	10¾
150 fire test, W. W.	11½@	11¾
In bulk from tanks	— @	9
300 fire test	9¾@	10

REFINED IN CASES—110 FIRE TEST.

Two five low screw, cargo lots	8.85
5,000 to 10,000	8.95
1,000 to 5,000	9.05
700 to 1,000	9.15
400 to 700	9.25
300 to 400	9.35
200 to 300	9.45
100 to 200	9.55
Under 100	9.85

NAPHTHA AND GASOLINE.

Naphtha, crude, car lots, 68@72 deg.	—@	9.05
crude, cargo lots, 68@72 deg.	—@	9.05
crude, 70 deg.	—@	10.55
sweet, 62 or 63 deg.	—@	11¼
76 deg.	—@	12½
"stove"	—@	12
Gasoline, 86 deg.	—@	15
88 deg.	—@	17
90 deg.	—@	20

Petroleum Statistics.

RUNS—PENNSYLVANIA OIL.

		Day.	Total Reported.
Friday,	Oct. 31	91,346	2,415,355
Sat.-Sun.,	Nov. 1 & 2	111,032	111,032
Monday,	" 3	84,326	195,358
Tuesday,	" 4	53,734	249,092
Wednesday,	" 5	68,532	317,624
Thursday,	" 6	.....	.....

	1899.	1900.	1901.	1902.
Jan.	2,420,074	2,836,815	2,934,948	2,559,185
Feb.	2,222,889	2,511,036	2,509,852	2,199,982
March.	2,549,528	2,945,673	2,869,586	2,560,762
April.	2,618,219	2,889,993	2,791,932	2,635,929
May.	2,705,791	3,074,578	2,921,334	2,713,013
June.	2,740,897	3,000,272	2,712,780	2,529,449
July.	2,776,507	3,032,983	2,915,841	2,777,650
Aug.	2,872,114	3,125,114	2,862,228	2,664,141
Sept.	2,764,932	2,920,457	2,585,682	2,727,494
Oct.	2,833,408	3,196,985	2,755,311	.....
Nov.	2,806,384	2,947,155	2,519,915	.....
Dec.	2,736,687	3,014,468	2,566,706	.....
Year.	32,207,577	35,486,529	32,496,116	.....
Average	2,683,968	2,957,211	2,745,509	2,598,401

DELIVERIES—PENNSYLVANIA OIL.

		Day.	Total Reported.
Friday,	Oct. 31	91,452	2,896,432
Sat.-Sun.,	Nov. 1 & 2	128,917	128,917
Monday,	" 3	117,232	246,149
Tuesday,	" 4	135,411	381,560
Wednesday,	" 5	97,376	478,936
Thursday,	" 6	.....	.....

	1899.	1900.	1901.	1902.
Jan.	2,475,510	2,887,970	3,135,704	3,013,150
Feb.	1,899,859	2,747,666	2,585,297	2,282,872
March.	2,626,415	2,797,661	2,885,557	2,613,412
April.	2,377,483	2,844,496	2,854,188	2,447,301
May.	3,578,579	2,793,247	3,033,527	3,410,053
June.	2,537,921	2,880,483	2,843,781	2,708,493
July.	2,357,715	2,756,173	3,287,511	2,740,665
Aug.	2,779,114	3,383,582	3,250,421	2,911,251
Sept.	2,700,000	3,031,430	3,075,809	2,792,104
Oct.	2,730,176	3,002,215	3,244,610	.....
Nov.	2,601,115	3,144,739	3,116,322	.....
Dec.	2,593,652	3,088,358	3,026,982	.....
Year.	30,276,630	35,358,024	36,339,709	.....
Average	2,528,052	2,940,502	3,028,309	2,768,811

CHARTERS—CRUDE EQUIVALENT.

		Day.	Total.	Av'ge.
Sat.-Sun.,	Nov. 1 & 2	123,175	123,175	61,587
Monday,	" 3	76,548	199,723	66,574
Tuesday,	" 4	.....	199,723	49,931
Wednesday,	" 5	59,524	259,246	51,849
Thursday,	" 6	84,127	343,373	57,229
Friday	" 7	69,841	413,214	59,031

	1899.	1900.	1901.	1902.
Jan.	1,736,232	1,859,255	2,397,332	2,878,610
Feb.	1,550,792	1,343,926	1,790,875	1,715,375
March.	2,461,826	2,175,073	2,023,459	2,698,879
April.	1,855,857	1,819,763	2,300,910	1,818,864
May.	2,214,071	1,062,851	2,420,809	1,796,904
June.	2,179,118	2,292,075	2,312,447	2,303,174
July.	2,165,092	2,061,761	2,782,838	2,000,021
Aug.	2,741,504	2,165,198	2,591,191	2,221,160
Sept.	2,199,802	2,164,186	2,459,552	1,946,905
Oct.	2,241,322	2,323,275	2,255,038	2,013,333
Nov.	2,292,703	1,705,256	2,274,245	.....
Dec.	1,692,790	2,027,385	2,229,595	.....
Year.	25,331,111	24,200,004	27,838,291	.....
Av'ge.	2,110,926	2,016,667	2,319,858	2,148,122

CHARTERS FOR THE WEEK.

The total charters for refined, crude, naphtha, etc., in bulk, barrels and cases, during the week ending Nov. 7, and from Jan. 1, were as follows:—

	Week.	Year.	1901.
Refined, bbls. & blk.	212,100	9,046,900	9,997,300
Refined, cases	.....	12,400,000	18,704,000
Crude, bbls, blk.	64,300	2,170,900	1,606,300
Crude, cases	.....	145,000	21,000
Naphtha, bbls	.....	802,500	270,800
Residuum, bbls	.....	695,100	414,300
Lubricating, bbls	.....	121,400	73,800
Total, bbls. cde. eq.	413,215	21,592,363	23,948,635

CLEARANCES FOR THE WEEK.

During the week ending Nov. 7, and since Jan. 1, the clearances of petroleum, in gallons, from the port of New York, were as follows:—

	Week.	Year.	1901.
Refined	7,003,118	394,244,722	446,120,556
Crude	51	104,491	2,412,760
Naphtha	12,063	9,305,376	9,514,984
Residuum	1,025	10,313,401	9,299,577

EXPORT STATISTICS.

The following table shows the total exports from the port of New York and from the United States, reduced to crude equivalent, in gallons for the week ending Nov. 7, also total shipments to date, with comparisons with 1901:—

From N. Y. for week ending Nov. 7	9,337,542
Total from N. Y. from Jan. 1, 1902	527,103,045
Same period last year	601,591,744
Decrease	74,488,699
From U. S. for week ending Nov. 7	22,558,206
Total from U. S. since Jan. 1, 1902	1,000,315,422
Same period last year	1,023,806,966
Decrease	23,491,544

TOTAL EXPORTS BY PORTS.

	1902.	1901.
New York	527,103,045	601,591,744
Philadelphia	422,642,350	371,101,990
Baltimore	48,625,312	45,759,098
Boston	604,197	156,666
San Francisco	1,340,318	97,468
Grand totals	1,000,315,422	1,023,806,966

Foreign Quotations.

REFINED.

	Antwerp.	Bremen.	London
Monday	19 @—	6.35	—@ 5⅜
Tuesday	19 @—	6.35	—@ 5⅜
Wednesday	19 @—	6.35	—@ 5⅜
Thursday	19¼@—	6.35	—@ 5⅜
Friday	19¼@—	6.35	—@ 5⅜
Saturday	19¼@—	6.35	—@ 5⅜

PETROLEUM CHARTERS.

Following is a list of vessels chartered and loading or to load petroleum at New York, Philadelphia, Baltimore and Boston. Quantities are refined in bbls. unless stated otherwise:—

New York.

Week ended July 18.

Ger shp Alice, Hong Kong, 16c. cs 90,000

Week ended July 25.

Fr bk Chas. Gounod, Java, 16c. cs 70,000
Fr bk Constable de Richemont, Hong Kong, 16c cs 75,000

Week ended Aug. 1.

Fr shp Boleldieu, Hong Kong, 16c. cs 75,000
Br shp Jessomene, Java, 16c. cs 75,000

Week ended Aug. 22.

Fr bk Crillon, Shanghai, 17½c. cs 75,000

Week ended Aug. 29.

Br bk Dunfermline, Hong Kong, 16. cs 115,000

Week ended Sept. 12.

Br bk Puritan, Padang, 16½c. cs 90,000

Week ended Sept. 19.

Ger bk Nomia, Japan, 16c. cs 80,000

Week ended Oct. 3.

Br shp Arno, Calcutta, 16c. cs 70,000
Ger bk Nomia, Japan, 16c. cs 76,000

Week ended Oct. 10.

Ger shp August, Blaye, 2s 4½d. nap 9,500

Week ended Oct. 17.

Br bk Lovisa, Pernambuco, 15c. cs 30,000

Week ended Oct. 24.

Br shp Moy, Calcutta, 10c. cs 65,000
Br str Melbourne, Bombay, 16c. cs 145,000
Am shp Roanoke, Shanghai, 17½c. cs 130,000
Nor bk Bonanza, Denmark, pt. 3,700
Br str Lennox, Shanghai, 18¼c. cs 140,000
Dch str Java, Java, 16c. cs 150,000

Week ended Oct. 31.

Br str Asama, Calcutta, 13c. cs 160,000
Br str Adana, Bombay, 12c. cs 120,000

Philadelphia.

Week ended Aug. 1.

Fr shp Faulconniere, Japan, 16½c. cs 80,000
Br bk Wanderer, Japan, 16@17c. cs 110,000
Fr bk Sully, Japan, 16@17c. cs 75,000
Br bk Dunstaffnage, Japan, 16½c. cs 135,000

Week ended Sept. 5

Fr shp Rene, Japan, 16c. cs 75,000
Fr bk Francois d'Amboise, Japan, 16c. cs 65,000

Week ended Sept. 19.

Ger shp Paul Rickmers, Japan, 16c. cs 115,000

Week ended Oct. 10.

Fr bk Buffon, Japan, 16@17c. cs 75,000

PETROLEUM CLEARANCES.

Following are the clearances of petroleum from the ports of New York, Philadelphia, Baltimore, Boston and San Francisco on the dates named. Refined, unless otherwise specified:

New York.

Oct. 28.

Nor str Uller, St Kitts, 3,000 cs
Nor str Uller, Demerara, 50 cs ref, 30 drs nap
Br sch Sanite Marie, Hamilton, 1,146 cs nap, 4 cs ben
Am str City of Washington, Colon, 200 cs

Oct. 29.

Br str Rosalind, Halifax, 10 bbls
Br str Rosalind, St Johns, 600 bbls, 500 cs, ref, 1 bbl
Br str Howick Hall, East London, 4,900 cs
Pr str Howick Hall, Algoa Bay, 14,450 cs
Am str New York, San Domingo, 1,400 cs, 2 bbls
Am str New York, Turks Island, 126 cs, 18 bbls
Am str Esperanza, Havana, 50 cs
Br str Fontabelle, Domenica, 50 cs
Br str Fontabelle, St Lusia, 100 cs
Br str Fontabelle, Demerara, 1,000 cs
Br str Fontabelle, St Croix, 435 cs, 3 bbls
Br str Fontabelle, Martinique, 1,375 cs

Oct. 30.

Ger str Capri, Pernambuco, 5,080 cs ref, 50 cs gas, 20 bbls resid
Am str Cienfuegos, Cuba, 100 cs

Oct. 31.

Br str Egyptian Prince, Montevideo, 13,200 cs
Ger str Standard, Flushing, 1,300,000 gls blk
Am str Virginia, Las Palmas, 12,000 cs
Pr sch Olympia, Curacao, 310 cs
Ger str Alene, Port Limon, 6 bbls, 50 cs ref, 5 cs nap, 2 cs ben, 1 bbl cde
Ger str Alene, Cartagena, 2,460 cs
Ger str Alene, Savanilla, 10 cs
Ger str Adirondack, Hayti, 700 cs
Ger str Erica, Kingston, 1,025 cs
Br str Egyptian Prince, Buenos Ayres, 2,000 cs
Nor str Parran, Barbadoes, 2,200 cs
Nor str Parran, S tMartins, 45 cs
Nor str Parran, St Thomas, 150 cs
Nor str Parran, Guadeloupe, 50 cs

Nov. 1.

Br str Pontiac, Malta, 8 cs nap

Nov. 3.

Br sh Kentmere, Shanghai, 96,353
Sch Chas L Mitchell, Paramaribo, 5,050 cs
Am bk Francis S Hampshire, Rio Janeiro, 20,000 cs
Br str Cumbal, Valparaiso, 10 cs ben
Br str Cumbal, Payta, 200 cs

Nov. 5.

Dtch str La Hesbaye, Antwerp, 1,125,000 gls blk
Br bk L G Crosby, Maceio, 8,000 cs

Nov. 6.

Am bktn Abiel Abbott, Trinidad, 2,000 cs
Dtch str La Campine, Antwerp, 1,100,000 gls blk
Br str Astrakhan, Avonmouth, 1,550,000 gls blk

Philadelphia.

Oct. 18.

Br str Crown Point, London, 180 bbls

Oct. 21.

Belg str Switzerland, Antwerp, 148 bbls resid

Oct. 23.

Br str Hanover, Hamburg 400 bbls resid

Oct. 25.

Br str Genesee, Copenhagen, 1,212,953 gls blk
Br str Bloomfield, Cette, 2,140,799 gls blk

Oct. 27.

Br str Lucifer, Dover, F O, 1,782,999 gls blk

Oct. 28.

Br str Luceline, Rouen, 1,655,317 gls cde blk
Br str Mira, Flushing, F O, 1,747,049 gls blk

Oct. 31.

Span bk San Ignacio de Loyola, Pasages, 275,676 gls cde blk
Swed sh Fidelio, Stockholm, 7,469 bbls

Baltimore.

Nov. 1.

Ger str Paula, Flushing, F O, 1,197,149 gls blk

Boston.

Oct. 31.

Fr sch Saratoga, Halifax, 100 gls

Nov. 5.

Br str Prince Arthur, Yarmouth, N S, 185 gls

San Francisco.

Oct. 25.

Str Barracouta, Guatemala, 8 cs
Str Barracouta, Nicaragua, 3 cs
Str Alameda, Honolulu, 178 cs

Oct. 28.

Str Queen, Br Columbia, 78 cs

Oct. 30.

Jap str America Maru, Philippine Is, 14 cs

Oct. 31.

Str Mariposa, Tahiti, 76 cs

EXPORTS OF PETROLEUM.

Following are the exports of petroleum from the port of New York (in gallons) during the past week and since Jan. 1, as also the exports during the corresponding period of last year:

Refined.

	For week.	Since Jan. 1.	Same time last year.
Aalborg	.....	1,200,695	464,100
Aarhuus	.....	905,780	870,000
Accra, W. C. A.	.....	10,000	57,000
Adelaide	.....	2,715,290	1,960,632
Aden	.....	35,000	80,000
Ajaccio	.....	67,200	.....
Alexandria	.....	.....	539,000
Algiers	.....	204,060	380,160
Algoa Bay	39,600	1,547,613	1,119,900
Amsterdam	.....	9,255,095	14,531,000
Anjier	.....	4,263,300	12,297,680
Antigua	.....	32,510	43,154
Antofagasta	.....	35,520	168,464
Antwerp	2,225,000	20,167,500	15,739,300
Arica	.....	3,000	5,000
Auckland	.....	1,747,700	709,660
Avonmouth	1,550,000	10,831,285	11,550,000
Axim	.....	.....	243,270
Azores	.....	225,272	168,464
Bahamas	.....	2,451	5,171
Bahia	.....	1,868,670	2,113,190
Barbadoes	22,000	345,068	364,159
Barranquilla	.....	60,060	.....
Barrow	.....	5,973,000	1,215,000
Bastia	.....	110,400	.....
Beira	.....	10,000	5,500
Belfast	.....	1,205,000	.....
Belize	.....	9,500	26,250
Bermuda	.....	305,026	318,642
Bluefields	.....	33,026	59,385
Bocas del Toro	.....	27,750	28,899
Bombay	.....	3,758,120	1,268,660
Bonny	.....	32,000	32,000
Bordeaux	.....	1,000	.....
Bremen	.....	20,454	22,630
Bremerhaven	.....	1,300,000	2,380,000
Brisbane	.....	1,115,410	1,349,280
Buenos Ayres	19,200	6,839,561	8,162,514
Cabedello	.....	.....	250,500
Calcutta	.....	2,040,480	4,310,750
Caldera	.....	2,750	2,500
Callao	.....	187,000	299,800
Campeche	.....	750	3,710
C. Coast, W.C.A.	.....	40,000	58,000
Cape Gracias	.....	.....	2,500
Cape Town	.....	2,944,330	2,356,730
Cartagena	24,000	212,940	177,330
Carupano	.....	14,670	36,200
Catania	.....	50,000	.....
Casa Bianca	.....	72,820	.....
Ceara	.....	293,050	184,150
Celba	.....	.....	1,250
Charlottetown, P. E. I.	.....	104,750	96,000
Chefoo	.....	.....	617,200
Christiansand	.....	.....	875,000
Ciudad Bolivar	.....	65,150	111,040
Colombo	.....	1,483,450	200,000
Colon	2,000	601,280	437,517
Conakry	.....	145,000	20,000
Copenhagen	.....	1,325,000	2,975,150
Corinto	.....	.....	69,300
Corn Islands	.....	.....	11,097
Cork	.....	223,808	184,012
Coro	.....	13,220	26,490
Corral	.....	70,000	20,000
Cuba	1,500	918,649	1,057,669
Cumana	.....	3,000	5,750
Curacao	3,100	162,452	123,664
Delagoa Bay	.....	130,370	38,500
Demerara	10,500	485,492	404,752
Desterro	.....	414,340	351,420
Domencia	590	27,633	23,804
Dover, F. O.	.....	2,564,091	9,924,537
Dublin	.....	7,450,000	4,200,000
Dunedin	.....	199,310	319,440
Durban	.....	500	18,500
Dutch Guiana	50,500	285,500	218,500
East London	47,780	1,385,750	672,788
Etem	.....	8,000	5,000
Flushing, F. O.	1,300,000	83,635,000	104,883,500
Foochow	.....	1,276,360	710,890
Forcados	.....	144,660	45,000
Frederica	.....	431,030	639,750
Fremantle	.....	965,660	1,706,339

French Guiana..	.....	96,284	81,924
Geestemunde ...	.....	.....	1,160,000
Gefle	.....	398,800	479,045
Ghent	.....	2,700,000	800,000
Gibraltar	.....	337,784	317,788
Glasgow	.....	500	600
Grand Cayman..	.....	51	.....
Grenada	.....	105,580	94,400
Greytown	.....	170,476	150,175
Guadaloupe	500	163,433	310,976
Guanta	.....	13,850	12,400
Guanaco	.....	.....	1,028
Guayaquil	.....	207,000	215,400
Hakodate	.....	2,733,130	.....
Halifax	500	362,770	35,750
Hamburg	.....	6,215,000	4,311,500
Havre	.....	4,200	1,600
Hayti	7,000	562,059	646,234
Hernosand	.....	.....	274,600
Hillsboro	.....	.....	6,250
Hiogo	.....	3,415,180	1,383,170
Hodeidah	.....	180,000	70,000
Hong Kong.....	.....	14,533,790	16,031,640
Honolulu	.....	50,000	.....
Hull	.....	1,212,800	1,200,550
Iquique	.....	9,200	3,500
Iquitos	.....	50,590	3,000
Jamaica	9,840	845,901	763,783
Kjoge	.....	138,282	193,350
Koenigsberg	.....	174,165	.....
Kurrachee	.....	.....	300,000
Lagos	.....	100,000	.....
La Guayra	.....	390,564	413,430
La Romana	.....	65,000	.....
Las Palmas	120,000	719,250	270,000
Lisbon	.....	1,485,548	24,000
Liverpool	.....	4,305,150	9,501,986
Livingston	.....	.....	1,500
London	.....	23,918,176	33,465,727
Lisbon	.....	.....	197,479
Lyttleton	.....	348,980	598,660
Macassar	.....	.....	302,750
Macelo	80,000	715,000	611,000
Madagascar	.....	.....	260,000
Madeira	.....	2,000	60,000
Madras	.....	.....	200,000
Malta	.....	22,500	110,000
Manaos	.....	444,921	465,049
Manchester	.....	3,046,778	5,967
Manila	.....	2,317,020	891,460
Maracaibo	.....	158,080	137,403
Maranham	.....	304,933	227,596
Martinique	13,750	184,462	209,020
Mauritius	.....	40,000	160,630
Melbourne	.....	5,335,550	7,376,891
Mollendo	.....	141,500	24,000
Moluccas	.....	177,500	.....
Mombassa	.....	.....	52,000
Montevideo	128,800	3,170,677	2,523,360
Montserrat	.....	150	100
Mossel Bay.....	.....	58,200	86,700
Naples	.....	2,400	487,060
Nassau	.....	93,048	86,763
Nassau, N. P...	.....	14,091	1,832
Newcastle	.....	38,800	14,000
Old Calabar	.....	45,070	112,000
Oporto	.....	781,864	1,370,539
Oran	.....	20,000	.....
Padang	.....	1,517,460	.....
Palmenburg	.....	.....	335,000
Para	.....	1,526,410	1,592,764
Parahyba	.....	224,000	.....
Pascasmayo	.....	20,000	9,100
Patras	.....	.....	6,250
Payta	2,000	6,000	14,600
Penang	.....	399,110	377,500
Pernambuco	50,800	2,646,740	2,247,280
Phillipville	.....	.....	80,000
Pimental	.....	7,000	11,000
Pisqua	.....	2,000	1,500
Pisco	.....	18,000	45,000
Plymouth	.....	156,026	158,166
Port Chalmers..	.....	258,000	333,930
Portishead	.....	.....	10,000
Port Elizabeth..	.....	53,200	226,040
Port Limon.....	806	100,057	77,586
Port Louis.....	.....	.....	297,660
Port Natal.....	.....	1,784,150	1,110,340
Port Said.....	.....	.....	20,000
Porto Cabello....	.....	179,510	357,339
Porto Cortez....	.....	12,910	17,990
Porto Rico.....	.....	2,000	529,854
Progreso	.....	6,950	13,060
Puerta Bolivar..	.....	.....	5,000
Punta Arenas ..	.....	72,500	46,070
Rangoon	.....	850,000	2,272,880
Reunion	.....	676,250	.....
Rio G. do Sul...	.....	1,905,560	717,720
Rio Janeiro.....	200,000	4,906,680	3,165,271
Rosario	.....	1,143,600	2,305,484
Rotterdam	.....	33,290,200	39,661,500
Sackville, N. B.	.....	5,000	12,900
Saigon	.....	711,000	1,097,940
Salaverry	.....	43,000	39,000
Salt Pond, W. C. A.....	.....	10,000	5,000
Samarang	.....	.....	1,108,330
San Andreas.....	.....	42,729	6,707
San Domingo...	14,100	384,324	377,768
San Fernando...	.....	61,460	67,300
Santos	.....	3,100,590	2,657,650
Savanilla	100	193,641	163,192
Shanghai	983,530	29,585,830	44,451,110
Singapore	.....	.....	4,420
Sierra Leone....	.....	200	33,000
St. Andrew.....	.....	1,500	.....
St. Croix.....	4,500	35,196	44,310
St. John, N.B...	.....	643,579	.....
St. Johns, N. F.	36,176	574,085	613,443
St. Kitts.....	30,000	134,450	85,500
St. Lucia.....	1,000	51,250	54,887
St. Martins.....	450	5,550	6,300
St. Thomas.....	1,500	30,492	22,040
St. Vincent.....	.....	91,008	38,500
Sourabaya	.....	2,770,270	1,678,360
Southampton ...	.....	2,367,834	2,000
South Shields....	.....	1,270,000	1,600,000
Stockholm	.....	509,490	.....
Sunderland	.....	2,820,000	1,550,000
Sundsval	.....	410,500	1,010,910
Sydney	.....	3,499,260	5,796,927
Talcahuano	.....	881,750	1,482,100
Tampico	.....	1,000	500
Teneriffe	.....	.....	202,570
Tilt Cove	.....	10,213	9,737
Trieste	.....	.....	6,000
Trinidad	19,200	559,955	444,570
Truxillo	.....	14,500	12,950
Tsintau	.....	650,000	622,030
Tuborg	.....	185,997	114,500
Turks Island ...	2,196	13,019	9,876
Valparaiso	.....	2,809,000	2,251,900
Vera Cruz.....	.....	7,200	4,500
Victoria	.....	163,700	.....
Wellington	.....	687,430	1,033,110
Winnebah	.....	.....	5,000
Yokohama	.....	15,393,000	17,775,700
Yokkaichi	.....	549,540	.....
Zanzibar	.....	823,210	552,000
Totals		7,003,118	395,293,721	449,120,639

Crude.

Brisbane	.....	.....	10,000
C. Bolivar.....	.....	769	1,907
Cuba	.....	1,000	11,223
Havana	.....	100,000	2,288,170
Hayti	.....	.....	50,000
Jamaica	.....	158	.....
London	.....	350	.....
Manchester	.....	1,000	500
Melbourne	.....	1,263	960
Port Limón	51	51	.....
Porto Rico	.....	500	.....
San Domingo....	.....	.....	50,000
Totals	51	105,091	2,412,760

Naphtha.

Aarhuus	.....	64,650	.....
Aalborg	.....	.....	99,250
Adelaide	.....	5,820	10,007
Algoa Bay.....	.....	17,380	290
Antofagasta	.....	200	.....
Auckland	.....	78,681	41,162
Bahia	.....	786	537
Barbadoes	.....	50	.....
Barranquilla ...	.....	100	.....
Bermuda	10,965	32,820	32,493
Bluefields	.....	1,590	2,427
Bocas del Toro..	.....	550	180
Bombay	.....	1,000	.....
Brisbane	.....	11,450	20,795
Buenos Ayres...	.....	57,861	49,712
Callao	.....	30	200
Cape Town	.....	22,547	8,042
Cartagena	.....	400	552
Ceara	.....	.....	200
Charlottetown, P. E. I.....	.....	500	500
Christchurch ...	.....	960	.....
Ciudad Bolivar..	.....	.....	40
Colon	.....	.....	1,200
Coquimbo	.....	2,000	30
Coro	.....	.....	10
Corral	.....	1,000	10
Cuba	.....	2,184	3,099
Curacao	.....	151	248
Delagoa Bay....	.....	600	.....
Demerara	300	4,850	.....
Dunedin	.....	13,700	1,013
Durban	.....	.....	30
Dutch Guiana...	.....	200	.....
East London ...	.....	9,750	3,178
Fremantle	.....	10,339	5,018
Furt Blaye.....	.....	1,187,539	2,148,955
Greytown	.....	110	260
Guadeloupe	.....	297	686
Guanaco	.....	100	14
Guayaquil	.....	300	500
Halifax	.....	1,000	.....
Havre	.....	1,000,106	871,943
Hayti	.....	1,067	4,259
Honolulu	.....	.....	400
Jamaica	.....	6,017	2,765
La Guayra	.....	150	.....
Lisbon	.....	38,000	.....
Liverpool	.....	2,624,678	2,207,895
Livingston	.....	.....	950
London	.....	2,663,394	2,466,321
Lyttleton	.....	10,938	4,329
Macelo	.....	95	475
Malta	80	1,336	.....
Manaos	.....	30	200
Manila	.....	11,100	11,000
Maracaibo	.....	.....	1,586
Maranham	.....	10	96
Martinique	.....	123	.....
Melbourne	.....	115,026	51,046
Mollendo	.....	100	50
Montevideo	.....	6,188	1,255
Para	.....	10	797
Pascasmayo	.....	200	200
Pernambuco ..	500	2,317	1,100
Pimental	.....	50	.....
Port Chalmers..	.....	1,460	2,788
Portishead	.....	234,450	420,987
Port Limon.....	67	1,328	1,258
Port Natal.....	.....	9,167	2,421
Porto Cortez ...	.....	290	984
Porto Rico	.....	640	3,090
Progreso	.....	90	.....
Rio G. do Sul...	.....	100	.....
Rio Janeiro.....	.....	2,190	985
Rosario	.....	1,545	4,353
Rouen	.....	605,549	835,580
San Domingo....	.....	120	.....
Santos	.....	255	2,000
Savanilla	.....	996	210
Shanghai	.....	8,020	1,000
Singapore	.....	2,000	200
St. John, N. B..	.....	.....	1,500
St. Johns, N. F.	51	7,077	964
Stockholm	.....	152,550	.....
Sydney	.....	105,034	137,927
Talcahuano	.....	.....	450
Teneriffe	.....	.....	1,058
Trinidad	.....	655	100
Truxillo	.....	1,010	.....
Tuborg	.....	106,750	.....
Valparaiso	100	4,900	5,150
Venice	.....	1,200	.....
Wellington	.....	25,560	5,070
Yokohama	.....	3,000	1,000
Totals		12,063	9,305,368	9,515,294

The Lard Supply.

Cable advices give the following estimates of the stocks of lard held in Europe and afloat on October 1, to which are added estimates of other periods and stocks in cities named:—

	Nov. 1, 1902.	Oct. 1, 1902.	Nov. 1, 1901.
Liverpool & Manchester	3,500	12,500	8,000
Other British ports....	700	1,200	5,000
Hamburg	2,500	5,000	12,000
Bremen	700	500	1,500
Berlin	500	1,500	2,000
Baltic ports.....	4,000	4,000	8,500
Amsterdam, Rotterdam & Mannheim	700	2,500	1,000
Antwerp	1,000	1,500	4,000
French ports.....	900	950	3,000
Italian & Spanish ports	500	500	1,000
Total in Europe.....	15,000	30,150	46,000
Afloat for Europe.....	37,700	35,000	45,000
Total in Europe and afloat	52,700	65,150	91,000
Chicago, prime steam..	9,567	34,900	26,193
Chicago, other kinds..	4,803	7,885	5,091
East St. Louis.....	None	100	1,027
Kansas City.....	2,028	2,791	4,705
Omaha	775	1,231	1,968
New York.....	4,458	5,911	3,345
Milwaukee	547	457	1,025
Cedar Rapids.....	*....	573	1,098
South St. Joseph.....	1,388	1,047	1,986
Total, tierces.....	77,166	120,045	137,436

*Not available.

Patents Granted.

710,190.—PROCESS OF EXTRACTING VEGETABLE ALBUMEN. Frederick W. Gaertner, Saginaw, Mich. Filed Jan. 27, 1902. Issued Sept. 30, 1902.

710,221.—AMMONIA STILL.—George Stroh, Detroit, Mich. Filed Feb. 24, 1902. Issued Sept. 30, 1902.

710,319.—NON-REFILLABLE BOTTLE.—John W. Edwards, Cleveland, O. Filed March 19, 1902. Issued Sept. 30, 1902.

710,357.—MANUFACTURE OF WINDOW AND PLATE GLASS. William E. Heal, Marion, Ind. Filed Jan. 25, 1902. Issued Sept. 30, 1902.

710,410.—HYDROCARBON-BURNER. Stanislaus Berens, Lagrange, Ill. Filed April 14, 1902. Issued Oct. 7, 1902.

710,438. — ROTARY DRILLING-MACHINE. Francis H. Davis and Coleman A. Terry, New York, N. Y. Filed June 6, 1901. Issued Oct. 7, 1902.

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PRATT'S PATENT

PREPARED GASOLEN

Adapted to all kinds of Gas Machines. 86°, 88° and 90° Gravities.

Pratt's Deodorized Stove Gasolene For use in Vapor Stoves. Made in accordance with the recommendations of the Vapor Stove Manufacturers and guaranteed not to smoke, smell or gum the burner.

Redistilled Naphthas Also Fuel Oil, Lima Crude, Distillates, &c.; prepared especially for Gas Companies and obtainable either in barrel or tank car.

Boulevard Gas Fluid For use in Vapor Street Lamps, Plumbers' Torches, &c.

Double-Distilled Deodorized Benzine and Naphtha of all grades, gravities from 62° to 76°, for manufacturing varnishes and mixed paints, rubber and gossamer goods, floor and table oil cloths, as well as for general use of druggists, dyers, cleaners, etc., etc.

The above goods can be had in quantities to suit the purchaser everywhere in the East, either through our agents or from us direct.

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Proprietors "Pratt's Astral Oil" 26 Broadway, New York

Wholesale Prices Current.

☞Our Quotations are those of Importers and Manufacturers, for original packages and large lots. For broken lots higher prices are asked.

Oils, Etc.

Vegetable Oils.

Linseed, city, raw, in bbls	℔ gal.	46 @47
boiled, in bbls		48 @50
out of town, on spot		43 @44
Calcutta, raw, in bbls		75 @—
Varnish oil, American		— @—
Calcutta		— @—
Cottonseed, crude, prime		35 @35½
" " f. o. b. mills		27 @28
Crude, off quality		— @—
Yellow summer, prime		34 @34½
Yellow summer, butter		40 @42
Yellow summer, off q'lity		33 @33½
White summer		44 @46
Yellow winter		41 @44
White winter		44 @46
Soap stock	℔ lb.	1.10@ 1¼
Olive	℔ gal.	53 @58
Olive soap stock		5¾ 6
Palm, red		5½@ 5¾
Lagos		5¾@ 6
Cocoanut, Ceylon		6 @ 6¼
Cochin		7 @ 8
Corn		5¼@5.30
Mustard		52 @53
Peanut, white		— @—
yellow		5¾@—
Rosin, first run	℔ gal.	13 @14
second run		15 @16
third run		17 @18
fourth run		19 @20
Rapeseed, in bbls, burning		66 @68
blown		63 @64
refined		63 @64

Animal and Fish Oils.

Black fish, crude	℔ gal.	35 @40
Bleached, winter		48 @49
Cod, domestic, prime		33 @35
Newfoundland		36 @37
Degras, French, per lb		4¾@ 5
English		2¾@ 3
German		2¾@ 3
Herring	℔ gal.	— @—
Lard, prime		87 @89
Extra No. 1		65 @68
No. 2		52 @56
Menhaden, prime, crude		— @—
Southern, prime		— @26
Brown, strained		31 @32
Light, strained		32 @33
Bleached, winter		34 @35
Ex.bleached, winter, white		36 @37
Neatsfoot, white		65 @68
Prime		55 @56
Dark		50 @52
20 deg. cold test		91 @92
30 deg. cold test		80 @81
Red, Elaine		48 @49
Saponified	℔ lb.	6¼@ 6½
Sea elephant, bleached, winter	℔ gal.	— @50
Natural, winter		— @46
Seal, bleached, refined		— @—
Sod, American		28 @29
English		34 @35
Sperm, crude		— @—
Natural, spring		71 @73
Natural, winter		75 @77
Bleached, spring		74 @76
Bleached, winter		78 @80
Tallow, prime		64 @65
Acidless		68 @69
Dark		55 @60
Whale, crude		— @—
Natural, winter		46 @47
Natural, spring		— @—
Bleached, spring		— @—
Bleached, winter		48 @49
Extra bleached, winter		— @50

Mineral Oils.

Black reduced, 20 gravity, 20@30 c. t.	9¾@10¼
29 gravity, 15 cold test	10¾@11¼
29 gravity, zero	11¾@12¾
Summer	9¼@ 9¾
Cylinder, light filtered	14¾@17¾
Dark filtered	11¼@15¾
Extra cold test	21¾@26¾
Dark steam refined	8¾@10¾
Natural, Franklin, 32 gravity	10¾@15¾
Smith's Ferry, 32@34 gravity	8¼@ 9¼
West Virginia, 29 gravity	22¾@24¾
Neutral filtered lemon, 33@34 gravity	12¾@19¼
White, 33@34 gravity	21¾@23¾
32@34 gray, bloomless	13¾@18¾
32 gray, wool grade	11¾@14¾
Paraffine, high viscosity	17 @24
903-907 sp. gr	12¼@12¾
903 sp. gr	11¾@11¾
883 sp. gr	9½@10
875 sp. gr	9¼@ 9¾
865 sp. gr	9¼@ 9¾
Red paraffine, No. 1	12¼@12¾
Red paraffine, No. 2	11¼@11¾
Spindle No. 1, filtered	15¾@16¾
No. 1	12¾@13¾
No. 2	11¾@12¾
No. 3	10¾@11¾
No. 4	10¼@10¾

Oil Cake, Meal, Etc.

Calcutta, cake, city	℔ ton.	27.00@—
City, domestic		25.00@26.00
Western, in bags		25.00@26.00
Cottonseed cake at Memphis		—@—
at New Orleans		25.75@26.50
at Boston		30.00@—
Cottonseed meal at Memphis		—@—
at New Orleans		25.75@—
Corn cake		25.00@25.50
meal		25.00@25.50

Wax, Lard, Tallow, Etc.

Paraffine wax, crude, per lb	4¾@ 5
refined, 120 m.p.	— @ 5½
125 m. p.	— @ 6½
130 m. p.	— @ 7½
135 m. p.	— @ 9
140 m. p.	11 @ —
Candles, adamantine, cs, 16 oz.	℔ lb. 10¾@11
14 oz.	11 @11½
paraffine, 4s. and 6s.	9¼@10½
12s, 16 oz.	10¾@11½
14 oz.	11 @12
12 oz.	—@—
patent sperm, 4s. and 6s.	38 @40
sperm, 4s. and 6s.	33 @34
Stearic acid—	
plain 4s., 6s. and 8s.	11¾@12
patent ends, 4s and 6s.	12¾@13
cartons, 6 lbs. each	13¾@14
Lard, spot, tierces	10¾@11
export, pkge	11.10@—
compounds	7½@ 7¾
neutral	12¾@12¾
Oleo, stearine	—@—
Lard, stearine	12½@12¾
Tallow	6¼@ 6½
Stearic acid	11 @11¼

Naval Stores.

Spirits turpentine, spot	℔ gal.	.54½@ .55
Rosin, strained		1.75 @1.77½
Good strained		1.77½@1.80
D		— @1.80
E		— @1.85
F		— @1.90
G		— @1.95
H		2.05 @2.10
I		2.40 @2.45
K		— @3.00
M		3.50 @ —
N		3.85 @3.90
Window glass		4.20 @4.25
W. W.		4.55 @4.60
Tar, ordinary		2.20 @2.25
oil, barrels		4.25 @4.35
Pitch		1.60 @1.70

Paints, Varnishes, Etc.

White Lead, Zincs, Etc.

White lead, American dry	℔ lb.	4¾@ 5
In oil		5½@ 6
English in oil		7¼@ 9¾
Litharge, American, powdered		5 @ 5½
English flake		8¼@ 8½
Glassmakers'		7¼@ 8½
Red lead, foreign		6¾@ 8¾
American		5¾@ 6
Orange mineral, American		7¾@ 8
English		8½@ 9½
French		11¾@—
German		8¼@ 9¼
China white		9½@10
Flake white		8 @ 9
Cremnitz, white		.13 @17
Zinc white, Paris G. S., 50 bbls.	3% less	4 ℔ ct
G. S., 25 bbls.	3%	2 ℔ ct
G. S., 10 bbls.	3%	1 ℔ ct
R. S., 50 bbls.	8%	4 ℔ ct
R. S., 25 bbls.	8%	2 ℔ ct
R. S., 10 bbls.	8%	1 ℔ ct
Antwerp R. S., 50 bbls.	6½	4 ℔ ct
R. S., 25 bbls.	6½	2 ℔ ct
R. S., 10 bbls.	6½	1 ℔ ct
G. S., 50 bbls.	8%	4 ℔ ct
G. S., 25 bbls.	8%	2 ℔ ct
G. S., 10 bbls.	8%	1 ℔ ct
G. S. in poppy oil		.12 @12½
R. S. in poppy oil		.10¾@11½
American, extra dry		4¾@ 4¾
Florence, Green Seal		6¼@—
Florence, Red Seal		5¾@—
German		5½@ 6

Dry Colors.

REDS.

Carmine, No. 40	℔ lb.	2.05 @2.75
Crocus martus, imported		2½@ 3½
standard American		1 @ 2½
Indian red, standard American		3 @ 3½
English		4½@ 8½
Rose pink, American		8 @ 10½
English		8½@ 10
Tuscan red, English		7 @ 10
Turkey red, English		4 @ 6
Venetian red, English, extra, ℔ 100 lbs.		1.80 @ 2
prime		1.15 @1.75
American		50 @1.50
Vermilion, imported English, ℔ lb.		80 @ 95
American quicksilver, bulk		— @ 70
bags		— @ 71
Chinese		1.05 @1.20
American		10 @ 40

BLACKS.

Bone	℔ lb.	2½@ 4
Carbon		5 @ 8
High grade		15 @20
Drop, American		4 @ 7
English		7 @11
Ivory		12 @21
Lamp, commercial		4½@ 6
refined		7 @12
calcined		10 @20
fine spirit		20 @35

BLUES.

Celestial	℔ lb.	4 @ 6
Chinese		30 @35
Prussian		28 @34
Prussian, foreign		32 @36
Refiners'		30 @34
Soluble		30 @35
Ultramarine		4 @20
Verditer		25 @30

BROWNS.

Sienna, Italian, burnt and powdered.	℔ lb.	3½@ 7½
burnt lump		1¼@ 3
raw, powdered		3½@ 7½
raw, lump		1¼@ 3
American burnt and powd'd.		1½@ 2
raw		1¼@ 2
Spanish brown		½@ 1
Umber, Turkey, burnt and powdered		2½@ 6½
burnt lumps		3½@ 4
raw and powdered		2½@ 3½
raw, lumps		2½@ 3
American burnt		1¾@ 2
raw		1¼@ 2
Vandyke brown, German		2¼@ 3½
American		1¾@ 2½

GREENS.

Chrome, chemically pure, per lb		19 @26
extra		12 @15
super		7 @10
common		5 @ 6½
Paris, pure		12½@15
in pulp		14 @—
Verdigris, French		22 @26

YELLOWS.

Chrome	℔ lb.	10½@ 25
Ocher		1½@ 2
Dutch (washed)		4¾@ 2
French do		1¾@ 1¾
golden		3½@ 4½
domestic	℔ ton.	$10.00 @15.00

Miscellaneous.

Barytes, prime white	℔ ton.	17.00 @20.00
foreign floated		19.00 @21.00
domestic floated		19.00 @20.00
off color		14.50 @17.00
crude, No. 1		9.00 @10.00
No. 2		8.00 @ 8.25
No. 3		7.75 @ 8.00
Blanc fixe	℔ lb.	2½@ 2¾
Bronze powder		55 @ 2.50
Brocades		55 @ 1.50
Chalk	℔ ton	2.50 @ 2.60
Clay, China, imported		12.00 @17.50
domestic		8.50 @10.00
Coal tar		3.50 @ 4.00
Cobalt, oxide	℔ lb.	2.26 @ 2.50
Feldspar	℔ ton.	12.50 @16.00
Fuller's earth, lump	℔ 100 lbs.	75 @ 80
powdered		75 @ 80
Lithopone		5 @ 5¼
Marble flour	℔ ton.	7.00 @ 8.00
Manganese, car lots	℔ ton.	22.00 @60.00
jobbing		3 @ 6
Magnesite, raw	℔ ton.	7.00 @ 8.00
calcined, pow'd.	℔ lb.	— @ 1¾
Plaster	℔ bbl.	— @ 1.75
dentists'		— @ 2.00
Pumice stone, orin'l cks	℔ lb.	1¾@ 2
selected lumps in bbls.		4¼@ 6
po'd pure, bbls.	℔ 100 lbs.	1¾@ 1¾
Putty, in bulk		2¼@ —
12½ to 25-lb. tins		2¼@ —
1 to 5-lb. tins		3¼@ —
bladders		2¼@ —
Rottenstone, casks	℔ lb.	6 @ 7½
selected lumps		6 @ 20
powdered, in bbls		3 @ 4
Silex	℔ ton.	12.00 @18.00
Smalt, German blue	℔ lb.	6 @ 10
super, black		4 @ 7
Talc, American	℔ 100 lbs.	90 @ 1.10
French		1¼@ 1½
Italian		1¾@ 6
Tera alba, American No. 1		65 @ 85
No. 2		45 @ 50
English		95 @ 1.00
French		95 @ 1.00
Whiting, commercial		40 @ 60
gilders'		45½@ 65
extra gilders'		55 @ 68
American, Paris		66 @ 75
English cliffstone		90 @ 1.10

Glues.

Extra white	℔ lb.	18 @ 23
Medium white		14½@ 16½
Cabinet		11½@ 16
Low grade		9 @ 12
Foot stock, white		10 @ 12½
brown		7½@ 10
Common bone		6½@ 8
Irish		13½@ 16
French		12 @ 40
German hides		12½@ 16
common		10 @ 12½

Varnish Gums.

Asphaltum, Barbadoes, per lb		2½@ 4
Cuban, prime		4¼@—
Egyptian		5¾@ 6½
Copal, Sierra Leone, cleaned		60 @75
Zanzibar, bold white		60 @70
medium white		50 @60
sorts		46 @50
bean and pea		32 @33
Manila, pale		14½@16
dark hard		13 @14
bright amber		10½@14
standard sorts		9 @10
nubs, No. 1		6½@ 7
No. 2		6 @ 6½
chips, No. 1		5½@ 6
No. 2		5 @ 5½
Damar, Batavia		12½@13½
Singapore		8 @ 9
Kauri, standard		27 @31
No. 2		17½@19
No. 3		11 @13
Chips		16 @23
Dust		6 @10
B. 1		18 @19
B. 2		10 @12
Brown chips		6 @15
Brown dust		4 @ 5
Single cross		33 @35
Double cross		40 @45
Triple cross		43 @48
Picture quality		65 @75
Pale and fine selected		50 @65
Sandarac		14 @18

Window Glass.

AMERICAN WINDOW GLASS.

SINGLE.

	AA	A	B	C
25 inch	32.00	26.75	25.50	24.00
34 "	33.50	28.00	26.75	25.30
40 "	36.00	30.00	28.00	26.30
50 "	37.50	31.75	29.50	....
54 "	38.75	32.75	30.00	....
60 "	40.00	34.75	31.00	....
70 "	42.75	38.50	33.75	....
80 "	48.75	44.50	38.50	....
84 "	52.00	47.50	41.75	....

DOUBLE.

	AA	A	B
25 inch	42.75	37.50	35.50
34 "	46.75	41.50	38.75
40 "	52.00	45.50	41.50
50 "	56.00	49.50	46.00
54 "	57.50	50.75	46.75
60 "	58.75	52.00	47.50
70 "	62.75	56.00	50.75
80 "	68.00	61.50	55.50
84 "	69.50	62.75	58.75
90 "	73.50	66.75	61.50
94 "	74.75	68.00	62.75
100 "	88.00	80.00	74.75

An additional 10 per cent. will be charged for all glass more than 40 inches wide. All sizes over 52 inches in length, and not making more than 81 united inches, will be charged in the 84 united inches bracket. All glass 54 inches wide or wider, not making more than 116 united inches, will be charged in the 120 united inches bracket.

Discounts—Car lots, 89 and 5 per cent. f. o. b. factory; 88 and 5 per cent. from jobbers' stock in less than carload lots.

Metallic Paints.

Brown	℔ ton.	19 00@21 00
Red		16 50@20 00

Colors in Oil.

Black coach Japan	℔ lb.	20 @35
in oil		14 @18
drop		14 @18
lampblack		12 @14
Blue, Chinese		36 @40
Prussian		32 @36
ultramarine		13 @16
Brown, sienna, burnt		10 @13
raw		10 @13
Umber, burnt		9½@12
raw		9½@12
Vandyke, brown		9½@13
Green, chrome		10 @12
Paris		— @24
Red, Indian		11 @14
Venetian		6 @ 8
Yellow, chrome		14 @18
ocher, French		6 @ 8

Drugs.

Opium.

Opium, natural (cases)	℔ lb.	2.72½@ 2.75
as wanted		2.77½@ 2.80
powdered		3.42½@ 3.45

Morphine.

Morphine, bulk	℔ oz.	1.90 @ 2.00
oz. vials		1.95 @ 2.05
¼ oz. vials, 2½ oz. bxs		2.23 @ 2.30

Codeine.

Codeine, pure, 10-oz. lots	℔ oz.	3.50 @ —
ozs.		3.65 @ —
eighths		3.75 @ —

Sulphate, nitrate and muriate, 25c., and phosphate, 50c., per oz. less than pure.

Quinine.

Quinine, 100 oz. tins	℔ oz.	26 @ —
50 oz. tins		26½@ —
25 oz. tins		27 @ —
5 oz. tins		28 @ —
1 oz. tins		31 @ —
German, outside		23½@ 24
Java		22½@ 23
Cinchonidia, bulk		21 @ 22

Miscellaneous.

Acetanilid, in bbls	℔ lb.	20 @ 21
Acid, benzoic, true	℔ oz.	7½@ 8
ex toluol	℔ lb.	32 @ 34
boracic, crystals, city		10¾@ 11½
powdered, city		11¾@ 11¾
carbolic, drums		14½@ 16
bottles		20 @ 22
citric, domestic, barrels		— @ 32
kegs		— @ 32½
Sicilian		32½@ —
pyrogallic, 100 lbs., bulk		1.70 @ 1.80
10 lbs., bulk		2.00 @ 2.20
pounds		2.25 @ 2.45
salicylic		34 @ 36
Alcohol, 94 per cent	℔ gal.	2.47 @ 2.49
ref. wood, 95 per cent		— @ 65
97 per cent		— @ 70
purified		1.20 @ 1.50
Aloin	℔ lb.	34 @ 40
Ambergris, black	℔ oz.	15.00 @20.00
gray		27.50 @30.00
Ammonia, carb., domestic	℔ lb	8 @ 8½
foreign		8¾@ 9¼
Ammonium, bromide		44 @ 45
Antimony, needle		7 @ 8
Areca nuts		7 @ 10
Balm of Gilead buds		— @ 35
Barium, chloride		1.67½@ 1.76
chlorate		— @ 28
nitrate		6 @ 6¼
Barbadoes tar, in bbls	℔ gal.	32 @ 40
Bayberry wax	℔ lb.	18 @ 20
Bay rum, bbls		1.85 @ 2.25
Beeswax, white, pure	℔ lb.	39 @ 50
yellow		27½@ 33
Bismuth, citrate		1.75 @ 1.80
subcarbonate		1.65 @ 1.70
subgallate		1.55 @ 1.60
subnitrate		1.40 @ 1.45
Blue pill		41 @ 42
Borax, in bbls		7½@ 7¾
in bags		7¼@ 7½
powdered		7½@ 8
Bromine, bulk		48 @ 53
Burgundy pitch		2½@ 3
Caffeine		3.25 @ 3.50
Calomel, American		86 @ 88
English		— @ 90
Cantharides, Chinese		40 @ 42½
powdered		45 @ 47½
Russian		62 @ 65
powdered		63 @ 65
Carnauba Wax, No. 1		18½@ 21
No. 2		16½@ 18
No. 3		12½@ 15
Carbon, bisulphide		9 @ 10
Caster oil, city, bbls		10½@ 12½
cases		11 @ 13
Castile soap, white, pure		11¾@ 11
Marseilles		8 @ 9
green, pure		8 @ 10
ordinary		6 @ 6½
mottled, pure		6¾@ 8
ordinary		5¼@ 5½
Ceresin, yellow		13 @ 15
white		14 @ 17
Chalk, precip		4 @ 6
Chlo. hydrate, crusts, 28-lb jar		85 @ 90
crystals		90 @ 95
100 lbs., 5c. less.		
Chloroform		45 @ 50
Civet		1.80 @ 2.00
Clover tops		5½@ 10
Cocaine, muri, bulk, ℔ oz.		3.50 @ 3.70
Cocoa butter, 12-lb. bxs., per bx.		35 @ 38
bulk		29 @ 30
Codliver oil, Newf'dland	℔ gal.	— @ 80
Norwegian	℔ bbl.	50.00 @54.00
Colocynth apples, Spanish	℔ lb.	18 @ 19
Trieste		38 @ 45

Cologne spirit, 190° ℔ proof gal.	1.53	@	1.54
Corrosive sublimate.....℔ lb.	77	@	79
Coumarin, refined.....	4.10	@	5.00
Creosote, beechwood	90	@	1.00
Cuttlefish, Trieste	20	@	23
Jewelers', small	43	@	45
Jewelers', large.....	75	@	80
Dragon's blood, mass.....	15	@	20
reeds	50	@	60
Epsom salts.....℔ 100 lbs	1.25	@	1.50
Ergot, Russian .....℔ lb.	32	@	35
Spanish	32	@	35
Ether, 1880	62	@	65
washed	66	@	68
1890	68	@	70
Eucalyptol	1.15	@	1.25
Formaldehyde	14½	@	16
Fusel oil .....℔ gal.	70	@	75
Gelatine silver .....℔ lb.	25	@	27
Gold	33	@	45
Glucose, 42 dgs.....℔ 100 lbs.	2.22	@	2.32
Glycerine, C. P., bulk.....℔ lb.	14½	@	15
drums and bbls. added.			
C. P., cans.....	15½	@	16
Dynamite	13¾	@	—
Grains of Paradise	15	@	18
Grape sugar, 10 deg...℔ 100 lbs.	—	@	1.50
Guarana .....℔ lb.	70	@	75
Haarlem oil	1.95	@	2.00
Hypophosphite, lime	52½	@	55
potash	52½	@	55
soda	52½	@	55
Iceland moss	5	@	6
Insect powder	14	@	26
Iodine, re-sublimed	2.70	@	2.75
Iodoform	3.00	@	3.05
Irish moss, ordinary	6	@	8
bleached	10	@	12
Isinglass, Russian	4.10	@	4.20
American	75	@	85
Japanese	60	@	65
Japan wax	10½	@	10½
Kola nuts, African.....	6	@	7
Licorice, mass, Greek.....	10	@	12
Spanish.....	14	@	20
stick, domestic	16½	@	23½
foreign	25	@	28
Lithia, carb.	1.35	@	1.50
Lupulin	25	@	28
Lycopodium	53½	@	55
Manna, large flake.....	55	@	60
small flake	40	@	45
sorts	38	@	40
Menthol	7.00	@	7.50
Myrbane oil.....	8½	@	9
Musk, pods, Cab .....℔ oz.	5.00	@	6.00
Tonquin	8.50	@	16.00
grain, Cab	9.00	@	10.00
Canton, extra	—	@	1.00
Canton, good	15	@	17
Tonquin 15.00	@	21.00	
Druggists' 14.00	@	14.50	
Naphthaline, balls .....℔ lb.	2¼	@	2¾
flakes	2¼	@	2¾
Nitrate silver, crystals.....℔ oz.	34½	@	36
Nux vomica.....℔ lb	2	@	2¼
Petrolatum, bbls., amber.....	3	@	3¼
pale yellow...	4	@	4½
lily white....	10	@	10½
snow white...	12	@	14
Phosphorus	45	@	1.10
Pilocarpine .....℔ oz.	12.00	@	15.00
Poppy heads .....℔ lb.	14	@	18
Precipitate, red	96	@	98
white	1.01	@	1.03
Potash, permanganate	9½	@	10½
Potassium, bromide, bulk.....	30	@	31
cyanide, bulk.....	24	@	25
iodide, bulk	2.05	@	2.10
Quicksilver	64	@	65
Resorcin	1.50	@	1.60
Rochelle salts	17½	@	18
Salicine, bulk	3.75	@	3.85
Salol, bulk, 5 lbs. or over.....	—	@	1.20
1 lb. bots.....	—	@	1.30
½ lb. bots.....	—	@	1.35
¼ lb. bots.....	—	@	1.45
In lots of 25 lbs., 5c. less; 100 lbs., 10c. less.			
Santonine, crystals, 25 lbs.....	—	@	6.15
Less.....	—	@	6.20
powdered, 10c. per lb. advance			
Seidlitz mixture	14	@	15
Sesame oil .....℔ gal.	72½	@	80
Soda, benzoate .....℔ lb.	35	@	37
salicylate	36	@	38
Sodium, bromide.....	39	@	40
Spermaceti, block.....	24	@	24½
cakes	25	@	25½
St. John's bread.....	2½	@	5
Strontia, nitrate	8	@	8¼
Strychnine, crystals, bulk..℔ oz.	55	@	80
Sugar of milk, cob .....℔ lb.	16	@	17
powdered	13	@	14
Sulphur, roll	1.85	@	2.15
flour	1.95	@	2.20
Tamarinds .....℔ keg	2.05	@	2.25
Thymol .....℔ lb.	2.20	@	2.40
Vanillin .....℔ oz.	62½	@	1.00
Venice turpentine .....℔ lb.	17	@	18
Zinc, chloride, gran.....	5	@	5½
sulphate	2¼	@	2¾

Balsams.

Copaiba, Central American, ℔ lb.	38	@	40
Para.	45	@	50
solidifiable	45	@	47½
Fir, Canada .....℔ gal.	3.15	@	3.60
Oregon	65	@	70
Peru .....℔ lb.	1.05	@	1.10
Tolu	32	@	34

Barks.

Angostura .....℔ lb	28	@	30
Bayberry	6	@	7
Black haw, of root, true.....	9	@	10
of tree.....	6	@	9
Buckthorn	4½	@	5
Cascara sagrada	4¾	@	7
Cascarilla, quills.....	—	@	16
ordinary	8	@	9
Canella alba	12	@	13
Cinchona—red, quills	20	@	25
broken	10	@	20
Yellow, quills	22	@	30
broken	15	@	20
Condurango	13	@	14
Coto	—	@	25
Cramp	5	@	6
Dogwood, Jamaica	5½	@	6½
Elm	25	@	30
Mezereon	8	@	10
Oak, red.....	2	@	4
white	3	@	—
Orange peel, bitter, Curacao, ¼s	2¾	@	3
sweet, Malaga, pieces	7	@	10
quarters	9½	@	10
sweet, Trieste.....	4¾	@	5¼
Prickly ash.....	9	@	12
Pomegranate, of fruit.....	9	@	11
of root.....	12	@	13
Quebracho	10	@	10½
Sassafras	6½	@	8
Simaruba	—	@	25
Soap, whole.....	3½	@	4
crushed	5	@	6
Wahoo, of root.....	18	@	20
of tree.....	7½	@	8
White Pine.....	—	@	4
White Poplar.....	3½	@	4
Wild Cherry.....	4	@	7½
Witch Hazel.....	3½	@	4

Beans.

Calabar .....℔ lb.	—	@	80
St. Ignatius	12	@	16
Tonka, Angostura.....	65	@	75
Para	27½	@	30
Surinam	42½	@	45
Vanilla, Mexican, whole.....	6.00	@	13.00
cuts	4.00	@	5.50
Bourbon, whole	2.00	@	7.50
Tahiti, whole.....	1.00	@	1.50
Vanillons	—	@	—

Berries.

Cubeb, whole.....℔ lb.	8	@	9
powdered	12	@	14
Fish (Cocculus Indicus)	3	@	3½
Juniper	3½	@	3¾
Laurel	4½	@	4¾
Prickly ash	25	@	35
Saw Palmetto	7	@	10

Essential Oils.

Almond, bitter.....℔ lb.	3.75	@	5.85
artificial	75	@	1.50
sweet, true.....	40	@	50
Peach, kernel.....	16	@	24
Amber, crude.....	13	@	15
rectified	22	@	23
Anise	1.20	@	1.25
Bay	2.65	@	3.00
Bergamot	2.00	@	2.25
Birch Tar, crude	12	@	15
extra	20	@	25
Cade	14	@	17
Cajeput	42	@	55
Camphor	8	@	10
Caraway seed	1.10	@	1.35
Cassia, 75@80 per cent.....	80	@	85
Cedar, leaf	65	@	70
wood	21	@	23
Cinnamon, Ceylon, heavy.....	8.00	@	10.00
Citronella	19½	@	23
Cloves, cans.....	57½	@	60
bottles	60	@	62½
Copaiba	75	@	85
Coriander	5.50	@	11.00
Croton	90	@	1.10
Cubeb	90	@	1.00
Cummin	3.00	@	3.50
Erigeron	55	@	80
Eucalyptus, American	34	@	45
Australian	40	@	60
Fennel seed, sweet.....	60	@	1.25
bitter	45	@	1.00
Geranium rose, African	5.25	@	6.50
Turkish	2.50	@	4.50
French	7.50	@	12.00
Ginger	3.75	@	6.00
Gingergrass	1.50	@	1.75
Hemlock	45	@	50
Juniper berries—rectified.....	50	@	1.00
twice rectified..	1.10	@	1.40
wood	17½	@	30
Lavender, cultivated	—	@	2.00
flowers	1.60	@	1.75
aspic pure	—	@	90
spike	—	@	90
garden	35	@	50
Lemon	65	@	85
Lemongrass	1.85	@	2.10
Limes, expressed	1.60	@	1.80
distilled	60	@	1.00
Linaloe	1.50	@	1.80
Mace, distilled	1.00	@	1.10
expressed	90	@	95
Malefern	—	@	1.75
Mustard, natural	4.50	@	5.50
artificial	2.25	@	2.75
Neroli, petale	32.50	@	40.00
bigarade	26.00	@	35.00
Nutmeg	90	@	1.10
Orange, bitter	2.00	@	2.25
sweet	1.20	@	1.55
Origanum	18	@	22
Patchouli, leaf	5.50	@	5.75
cultivated	—	@	6.00
Pennyroyal	1.20	@	1.25
Peppermint, tins	4.75	@	5.00
bottles.....	5.00	@	5.25
Petit grains, French	4.00	@	6.00
South America....	2.50	@	2.80
Pimento	1.75	@	2.50
Rhodium	2.00	@	7.00
Rose .....℔ oz.	4.50	@	5.00
Rosemary flowers, French..℔ lb.	75	@	1.00
Trieste	40	@	50
Sandalwood, East India	3.40	@	3.75
West India	1.70	@	2.00
Australia	2.75	@	3.00
Sassafras, natural	40	@	42
artificial	30	@	32
Safrol	32	@	34
Savine	65	@	1.50
Spearmint	3.75	@	4.00
Spruce	45	@	50
Tansy	2.25	@	4.00
Thyme, red, French	96	@	1.00
white, French	96	@	1.10
Wintergreen, nat'l (sweet birch).	1.50	@	1.75
synthetic	47½	@	55
leaf	2.00	@	2.50
Wormseed—Baltimore	1.10	@	1.25
Wormwood, pure.....	5.50	@	6.00
Ylang ylang	40.00	@	70.00

Flowers.

Arnica .....℔ lb.	8½	@	9
Calendula	19	@	22
Chamomile, Roman	14	@	15
German, true	17	@	22
Hungarian	12	@	15
Elder	9	@	11
Insect	15	@	26
Lavender, ordinary	5½	@	—
select	7½	@	9
Mullein	65	@	—
Poppy, red	—	@	35
Rosemary	15	@	16
Saffron, American	20	@	—
Alicante	5.00	@	6.00
Valencia	6.25	@	6.50

Gums.

Aloes, Curacao, in boxes...℔ lb.	3	@	4
Cape	—	@	10
Socotrine	18	@	20
Ammoniac	20	@	—
Arabics, firsts	34	@	40
seconds	21	@	27
thirds	17	@	20
fourths	14	@	18
sorts	8½	@	10
Asafoetida	15	@	22
Benzoin, Siam	50	@	80
Sumatra	27	@	55
Camphor, American, barrels.....	—	@	55½
cases.....	—	@	56
Chicle	38	@	40
Euphorbium	—	@	15
Galbanum	70	@	75
Gamboge, pipe	60	@	62½
block	57½	@	60
Guaiac	18	@	35
Kino	—	@	25
Mastic	38	@	40
Myrrh	16	@	22
Olibanum, siftings	4	@	4½
sorts	6	@	7
tears	9	@	10
Sandarac	13	@	17
Scammony, rosin	—	@	2.25
Aleppo	2.75	@	2.90
Virgin	4.00	@	6.50
Senegal, picked	15	@	24
sorts	11	@	12
Spruce	1.25	@	1.75
Tragacanth, Aleppo, firsts	67½	@	75
seconds	55	@	65
thirds	45	@	50
fourths	30	@	35
Turkey, firsts.....	75	@	90
seconds	50	@	60
thirds	40	@	45

Herbs and Leaves.

Aconite .....℔ lb.	8½	@	10
Althea	10	@	12
Bay	14	@	15
Belladonna	10	@	13
Buchu, short	28	@	30
long	85	@	1.00
Cannabis Indica, tops.....	70	@	75
siftings	65	@	—
Coca, Huanoco.....	30	@	32
Truxillo	18	@	19
Coltsfoot	7	@	9
Conium	7	@	8
Deer tongue	4	@	5
Damiana	15	@	17
Digitalis	8	@	10
Eucalyptus	3½	@	5
Grindelia robusta	6	@	6½
Henbane (hyosciamus)	7	@	10
Horehound	5½	@	6½
Jaborandi, long	18	@	21
round	15	@	18
Laurel	2½	@	3
Lobelia	7½	@	9
Matico	8	@	12
Marjoram, German	21	@	22
French	14	@	16
Pennyroyal	—	@	8½
Peppermint, American.....	—	@	10
German	40	@	50
Pichi, tops	13	@	16
Pulsatilla	10	@	11
Prince's Pine.....	—	@	8
Rose, red	85	@	95
Rosemary	3½	@	4
Rue	13	@	16
Sage, Italian, picked.....	3½	@	4½
Savory	5½	@	6½
Scull cap	14	@	16
Squaw vine	7	@	8
Senna, Alex. whole leaf.....	21	@	25
half leaf	12	@	20
siftings	6	@	7
Tinnevelly	5	@	14
Stramonium	6	@	7
Thyme	5½	@	6½
Uva Ursi	3½	@	5
Witch hazel	5	@	6
Wormwood, foreign	6½	@	7
Yerba Santa	5	@	6

Roots.

Aconite, German.....℔ lb.	10	@	12
Alkanet	5½	@	6
Althea, whole	15	@	20
cut	20	@	25
Angelica, German	14	@	16
American	—	@	15
Arnica	10	@	14
Arrowroot, Bermuda, genuine...	35	@	40
St. Vincent, bbls.....	8½	@	10
Belladonna, Atropa	9½	@	11
Berberis Aquifolium	8	@	9
Bitter	—	@	16
Blood	6½	@	7
Bluefiag	—	@	8
Byronia	8	@	9
Burdock	5	@	6
Calamus, bleached	25	@	30
unbleached	7	@	12
Cohosh, black	3½	@	4½
blue	—	@	5
Colchicum	8½	@	9
Colombo	7	@	10
Culvers	7	@	9
Dandelion, German	7	@	7½
Doggrass	5	@	6
Galangal	6½	@	7½
Gelsemium	5½	@	6½
Gentian	4	@	4½
Ginseng, Southern	3.75	@	4.00
Northwestern	5.00	@	6.00
Eastern	5.00	@	6.00
Ginger, Jamaica, unbleached...	9½	@	9½
bleached.....	11	@	13
Golden seal	52	@	54
Hellebore, white	6	@	6½
black	5	@	6
powdered	7	@	7½
Hydrangea	4½	@	5
Ipecac, Rio	1.60	@	1.70
Cartagena	90	@	95
Jalap	11	@	12
Kava Kava	11	@	12
Lady Slipper	18	@	20
Licorice, in bales.....	3½	@	4
selected, bundles	7½	@	10
Lovage, American, per lb.....	—	@	—
German	12	@	16
Mandrake	4½	@	5
Musk, Russian.....	13	@	14
Orris, Florentine, bold.....	9	@	11½
small.....	7½	@	10
Verona	4½	@	6
Fingers	60	@	65
Pareira brava	11	@	12
Pellitory	15	@	16
Pink	19	@	22
Pleurisy	11	@	15
Poke	3½	@	4½
Rhatany	11	@	12
Rhubarb, Canton	25	@	35
Shensi	55	@	60
high dried	12½	@	20
clippings	12½	@	30
Sarsaparilla, Honduras	28	@	32
Mexican.....	7	@	7½
Senega, Southern	65	@	70
Western	62	@	65
Serpentaria	43	@	45
Skunk cabbage	7½	@	8
Snake, Canada	25	@	30
Virginia	—	@	45
Stillingia	4	@	6
Stone	4	@	5
Squills	3½	@	4
Unicorn, false	30	@	35
true	—	@	16
Valerian, German	15	@	16
Belgian	5	@	6
English	18	@	20
Wild Yam	5½	@	6
Yellow Dock	—	@	8
Zedoary	9	@	10

Seeds.

Anise, Italian, sifted.....℔ lb.	10	@	10¼
Russian	5½	@	6
Levant	7	@	7½
star	14½	@	17
Canary, Sicily	3¾	@	3¾
Smyrna	3¾	@	3½
Caraway, Dutch	5	@	5½
Cardamoms, bleached	50	@	75
decorticated	50	@	52
Celery	7½	@	8
Colchicum	42	@	45
Conium	7	@	7¼
Coriander, natural	2½	@	2¾
bleached	3	@	3¼
Cummin, Malta	8	@	8¼
Fennel, German	9	@	10
Italian	5½	@	6
Flax, per bbl.....	6.50	@	6.75
ground, per lb.....	3½	@	4
Fenugreek	2	@	2¼
Hemp, Russian	3	@	3¼
Larkspur	40	@	45
Lobelia	45	@	50
Millet	1½	@	1¾
Mustard, brown, Bari	4½	@	5
California.....	4½	@	4½
German	2¾	@	3
Sicily	4	@	5
Trieste	7½	@	8
yellow, California.....	4½	@	5
English	5	@	5½
German.....	3½	@	4
Poppy	6½	@	7
Pumpkin	5	@	—
Quince	34	@	35
Rape, English	—	@	4½
German	3	@	3½
Domestic	3	@	3½
Sabadilla	11	@	14
Stavesacre	10½	@	11
Stramonium	—	@	9
Strophanthus, Kombe	95	@	1.00
Hispidus	45	@	50
Sunflower	3	@	3½
Worm, Levant	11	@	12
American	13	@	14

Shellac.

D. C. .....℔ lb.	40	@	42
Diamond I.....	—	@	39
V. S. O.....	40	@	42
No. 2 orange.....	32	@	33
T. N.	29	@	30
A. C. Garnet.....	30	@	31
Button	30	@	40
Bleached	29	@	39

Spices.

Cassia, Batavia, No. 1.....℔ lb	18	@	19
No. 2.....	13	@	13½
Canton, matted rolls....	7½	@	7¾
broken	3	@	5½
Saigon, rolls	43	@	43½
broken	31½	@	33
buds	21	@	21½
Cloves, Amboyna	12	@	12¼
Zanzibar	8¾	@	9
stems	3½	@	3¾
Ginger, Calcutta	8	@	8¼
Cochin	9½	@	10
African No. 1.....	8¾	@	9
Mace, Banda	40	@	42
Batavia	30½	@	31
Penang	40	@	42
Nutmegs, 105's to 110's.....	19	@	20
Pepper, black, Acheen.....	11½	@	11¾
Singapore.....	13	@	13½
Tellicherry.....	13	@	13½
white, Penang.....	19½	@	19¾
Singapore	21	@	21½
red, Japan	14	@	14½
Zanzibar.....	11½	@	11¾
Pimento, No. 1.....	5	@	5¼
grinding	4¾	@	5

Chemicals.

Heavy Chemicals.

Alkali, 48 per cent., Solvay.			
℔ 100 lbs.	92½	@	97½
ammonia, high test....	77½	@	85
Bleach, over 35 per cent.....	1 60	@	1 75
Salt cake	82½	@	85
Soda, ash, carb, 48 per cent.....	—	@	—
high test	90	@	95
caustic, 48 per cent.....	—	@	—
Newcastle, 48 per cent....	—	@	—
high test.....	—	@	—
Soda, bicarb., English.....	1 80	@	1 90
American.....	1 25	@	3 00

Caustic, domestic, ₱ 100 lbs.			
60 per cent.	1 95	@	2 10
70 per cent.	1 85	@	1 95
74 per cent.	1 90	@	2 25
foreign, 60 per cent.	—	@	—
70 per cent.	—	@	—
74 per cent.	—	@	—
76 per cent.	2 25	@	2 50
powdered, granulated.			
60 per cent.	2 75	@	3 00
70 per cent.	2 85	@	3½
74 per cent.	3 00	@	3½
A. C. P.	3¼	@	3½
Sal, English	67½	@	72½
American	60	@	70

Acids.

Acid, acetic ₱ 100 lbs.	1 80	@	4 25
chemically pure ₱ lb.	20	@	21
oxalic	5¼	@	5¾
pyroligneous	9	@	10
sulphuric, 60 deg. ₱ 100 lbs	1 25	@	1 70
66 deg.	1 20	@	1 40
bulk 50 deg.	14.00	@	15.00
muriatic, 18 deg.	1.50	@	1.60
20 deg.	1.60	@	1.70
22 deg.	1.75	@	2.00
aqua fortis, 36 deg. ₱ lb.	4½	@	4¾
38 deg.	4½	@	5
40 deg.	4¾	@	5¼
42 deg.	5¼	@	5½
nitric, 36 deg.	4¾	@	4¾
38 deg.	4¾	@	5¼
40 deg.	5	@	5¼
42 deg.	5¾	@	6
tartaric crystals	28¼	@	28½
powdered	28¾	@	29

Miscellaneous Chemicals.

Acetate of lime, gray. ₱ 110 lbs	1 35	@	1 40
brown	90	@	95
Alum, lump	1 75	@	1 80
ground	1 85	@	1 90
porous	1 85	@	1 90
Argols, plates ₱ lb.	—	@	—
red	2 20	@	2 30
Arsenic, white	3	@	3¼
red	6¾	@	7¼
Brimstone, crude, 2ds. ₱ ton.	23 00	@	23 50
3ds.	21 25	@	22 00
Cream tartar, crystals, p. c. ₱ lb	22¾	@	23
powdered, 90 p. c.	22¾	@	23
Chlorate of soda	7½	@	7¾
Chloride of calcium	75	@	90
Copperas	42½	@	65
Glauber salts	75	@	85
Nitrate of lead	6¼	@	6¾
soda	1 97½	@	—
Sugar of lead, brown	6¼	@	6½
white	8¼	@	8½
Saltpeter, crude	3 35	@	3 45
refined	4¼	@	5¼
Sulphate, alumina	1¾	@	1½
Vitriol, blue	4 60	@	4 75

Ammoniates, Potashes, Etc.

Ashes, pot, 1st sorts. per lb.	4	@	4¼
pearl	5	@	5½
Potash, chlorate	7	@	7½
powdered	7½	@	7¾
carb	3¾	@	4½
caustic	5	@	6
dbl. m'r'e salt. 48@53%.	1 00	@	1 11½
dbl. m'ure salt. 48@53%. less than 25 tons.	24 00	@	30 00
sulph. of. basis 90@98 %.	2 08	@	2 14
90@98% less than 25 tons	38 00	@	40 00
Kainit, 25% S. of P. ₱ ton.	8 80	@	9 30
less than 25 tons	9 05	@	9 55
Sylvinit, 35@37% P. ₱ unit.	38	@	40
Aq. am'ia (in cbys) 16 deg. ₱ lb.	9	@	9½
18 deg.	3¼		4
20 deg.	3¾	@	4½
26 deg.	5½	@	6¼
Ammoniac, sal, gray	5¾	@	6
granulated	5¾	@	6¼
lump	9¼	@	9½
Ammonia, sulphate	2 95	@	2 97½
Potash, muriate. ₱ 100 lbs.	1 80	@	1 86½
less than 25 tons	36 00	@	40 00
Nitrate of soda	1 97½	@	—
Blood, dried, red. ₱ unit.	2 40	@	—
low grade	—	@	—
Concentrated tankage	15 00	@	16 00
Bones, rough ₱ ton.	16 50	@	17 50
ground	20 00	@	21 00
Bone meal	16.00	@	23.00
Bone black, refuse	17.00	@	19.00
Fish, guano, dried	27 00	@	28 00
acidulated	14 00	@	—
Phosphate rock, f. o. b. Char'n.	3 00	@	3 25
Tenn.	3 00	@	4 75
Acid phosphate	60	@	65

Dyestuffs.

Acid, gallic ₱ lb.	57½	@	60
picric, best crystals	34	@	38
tannic, commercial	34	@	40
crystals	65	@	70
Acetate of soda	4	@	4½
Albumen ,egg	45	@	65
blood	14	@	20
Alizarine, red	15½	@	16½
assistant	9	@	12
Aniline oil	9	@	9½
salt, crystals	9	@	9½
Annatto	8	@	12
fine	25	@	—
seed	—	@	5
Antimony, oxymuriate	4	@	6
salt, 65%	16	@	17
47%	13½	@	15
tartar emetic	21	@	23
Bichloride of tin, 50 deg.	8¾	@	9
60 deg.	11½	@	11¾
Bichromate of potash, American.	8¼	@	8½
Bichromate of soda	6¼	@	6½
Bisulphate of soda	1½	@	2¼
Carmine of indigo	60	@	75
Cochineal, Teneriffe, silver	17	@	19
black	19	@	20
gray black	21	@	23
Cudbear, French	12	@	18
concentrated	23	@	25
English	10	@	18
Cutch, mat	5	@	5½
refined	5	@	6
refined, in boxes	5¾	@	6
slabs, in boxes	8	@	10
Dextrine, imported	5½	@	7
domestic	5¾	@	6
corn	3½	@	4
Divi Divi ₱ ton.	—	@	45.00
Flavine ₱ lb.	23	@	42
Fustic stick ₱ ton.	16.00	@	24.00
young root	32.00	@	36.00
Gambier ₱ lb.	6¼	@	7
Cube No. 1	10	@	11½
No. 2	9	@	9½
Garancine	6	@	8
Hypo. of soda, Am., cks—₱ cwt.	1.60	@	1.65
kgs.	1.70	@	1.95
German, cks.	1.70	@	2.00
kgs.	1.90	@	2.30
Indigo, Bengal, low grade. ₱ lb.	65	@	70
medium	70	@	80
high grade	90	@	1.10
Kurpahs, medium to good.	55	@	60
higher grade	65	@	75
Guatemala	55	@	75
Manila	48	@	55
Madras	—	@	—
J. (Synthetic)	25	@	—
Indigotine	95	@	1 80
Logwood stick ₱ ton.	15 00	@	22 00
roots	16 00	@	17 50
Madder, Dutch ₱ lb.	8	@	10
French	6	@	7½
Myrabolans	2¼	@	2½
Muriate of tin, 36 deg.	—	@	9
52 deg.	—	@	15
Nitrate of iron, commercial	1¼	@	1¾
true	4	@	4½
Nutgalls, blue Aleppo	13½	@	14
Chinese	14	@	14½
Persian berries	6	@	6½
Prussiate of potash, yellow	13½	@	13¾
red	37	@	38
Prussiate of soda	11	@	12
Phosphate of soda	2¾	@	2¾
Quercitron ₱ ton.	18 00	@	21 00
Sago flour ₱ 100 lbs.	3¼	@	3¼
Salts of tartar ₱ lb.	5½	@	7
Silicate soda	1	@	1½
Soluble oil, 50 per cent.	6½	@	7
75 per cent.	11	@	12
Starch, corn, pearl, in bbls.	2 72	@	4
in bags.	2 62	@	3½
potato	3¾	@	4¼
rice	7½	@	9
wheat	4½	@	6
Stannate of soda	10	@	18
Sumac, Sicily, No. 1. ₱ ton.	48 00	@	50 00
No. 2.	42 00	@	45 00
Virginia	33 00	@	34 00
Tapioca flour ₱ lb.	2¼	@	2¾
Tin crystals	22	@	23½
Turmeric, Bengal	7	@	7¾
Aleppo	7¼	@	8
Chinese	7	@	7½
Coringa	6½	@	7
Vanadiate ammonium ₱ oz.	—	@	60
Zinc dust ₱ lb.	5	@	5½

Chipped Dyewoods, Etc.

Barwood ₱ lb.	2	@	2¼
Camwood	6	@	8
Fustic	1¾	@	2
Hypernic	3	@	3¼
Logwood, Campeche	1¼	@	1¾
Red sanders	2¾	@	3

Extracts.

Archil, double ₱ lb.	8	@	13
concentrated	9	@	15
Barberry, French	22	@	28
Chestnut	2½	@	3
Oak	3½	@	4
Hemlock	2½	@	2¾
Fustic, solid	9	@	11
liquid, 51 deg.	7	@	10
Gall	13	@	17
Indigo	7	@	20
Logwood, solid	6½	@	12
liquid, 51 deg.	5	@	10
42 deg.	4	@	6
crystals	15	@	25
Quebracho, sllod	4¾	@	5½
51 deg.	3½	@	5
42 deg.	3	@	4
Quebracho, solid	4¾	@	5½
Persian berry	8½	@	12
Sumac	3¼	@	7

Comparative Prices.

On Nov. 10, 1899, 1900 and 1901.

Chemicals.	1901.	1900.	1899.
Bleaching powder	$1.85	$1.75	$1.75
Brimstone, 3ds	21.00	19.00	20.75
Caustic Soda, 70 p. c.	1.90	1.75	1.80
Caustic soda, 60 p. c.	1.95	1.85	1.87½
Sal soda, Am.	.55	.60	.60
Soda, ash, 48 p. c. carb.	—	1.20	.95
Soda, ash, 48 p.c. caustic	—	—	—
Soda, alkali, 48 p. c.	.95	.85	.95
Soda, nitrate	1.89	1.80	1.75
Cream tartar, crystal	.19½	.21	.22¾
Muriate of potash	1.83	1.83	1.78
Chlorate of potash	.08¼	.08½	.09¼
Kainit	9.05	9.05	8.70
Paints.			
White lead in oil	.05¾	.06½	.06
Litharge, Am., pow'd	.04¾	.06½	.06
Paris green	.12½	.12½	.11
Orange, mineral	.08	.07¾	.07¾
Ven. red, English	1.80	1.80	1.75
Ven. red, American	.80	.80	.80
Barytes	17.00	17.00	18.00
Whiting, commercial	.40	.42	.42½
Drugs.			
Opium	3.05	3.40	3.07½
Morphine, domestic	1.70	2.00	1.95
Quinine	—	—	.27
Alcohol	2.53	2.45	2.42
Borax, city	.07¼	.07½	.07¼
Beans, tonka (Ang.)	.80	.70	.65
Cubeb, XX	.10½	.11	.06
Cuttlefish	.21	.26	.20
Glycerine, C. P., drums	.14½	.15	.14½
Oil, castor, city	.12	.12½	.11½
Oil, Cassia	.72½	.85	1.00
Oil, codliver, Nor	21.00	24.50	26.00
Oil, peppermint, tins	1.75	1.10	.90
Oil, sassafras	.40	.43	.40
Quicksilver	.66½	.67½	.65
Asafoetida	.26	.18	.16
Gum arabic, sorts	.13	.14½	.16½
Camphor, bbls	—	.60½	.49
Shellac, D. C.	.34	.30	.28
Senna, Alex. Nat'l	.21	.23	.25
Senega root	—	—	.40
Ipecac	2.70	2.75	3.60
Jalap	.12	.12½	.18
Canary seed, Smyrna	.02¾	.02½	.03
Caraway seed, Dutch	.05	.07½	.06¼
Mustard seed, Cal., yel.	.05	.06	.06¼
Rape seed, German	.03½	.03¾	.03¼
Oils.			
Cottonseed, prime, S. Y.	.34	.33½	.27
Olive, Sicily	.58	.55	.53
Cocoanut, Ceylon	.06¾	.06	.06¼
Lard, prime, city	.72	.57	.44
Linseed, domestic	.65	.75	.44
Menhaden, prime, cde	—	.25	.25
Whale, bl'ch'd, winter.	.47	—	—
Sperm, bleached, winter	.65	.61	.58
Oil cake, Western	29.00	28.50	27.00
Spirits, turpentine	.38	.43½	.51½
Dyestuffs.			
Bichromate potash, Am.	—	.08¾	.09½
Cochineal, Teneriffe, S.	.16	.18	.23
Cutch, bag	.04½	.05½	.04
Gambier	5.50	4.25	3.00
Indigo, Bengal, h. gde.	.85	.95	.85
Prussiate potash, yel.	.13½	.15	.19¼
Starch, corn	1.98½	1.55	1.55
Sumac, Sicily, prime	49.00	55.00	68.00

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ACID PICRIC.
ACID SALICYLIC.
AMMONIA, Carbonate and Muriate.
AMYL ACETATE, Pure
ANILINE OIL AND SALT.
ANTIMONY, Japan Needle.
ARROW ROOT.
BENZOLE AND SOLVENT NAPHTHA.
CALCIUM CHLORIDE.
CHALK, Precipitated.
CHLORAL HYDRATE, Crystals and Crusts.
CREOSOTE OR DEAD OIL.
DEXTRINE.
FORMALDEHYDE.
GUMS, ELEMI, SANDRAC, Etc.
JALAP ROOT.
LYCOPODIUM.
MAGNESIA CARBONATE.
MANGANESE BORATE.
MENTHOL.
NAPHTHALINE, All Kinds.
NUT GALLS, Aleppo.
OIL, COD LIVER.
OIL FUSEL, Crude or Refined.
OIL MINERAL, White.
OIL MYRBANE.
OIL OLIVE, Malaga, Italian.
OIL RAPE, Refined.
OIL SASSAFRAS.
OIL WOOD, Chinese.
PITCH, STEARINE (Candle Tar).
POTASH CHLORATE.
POTASH CYANIDE, Beckton.
POTASH PERMANGANATE.
POTASH PRUSSIATE, Yellow.
SODA CHLORATE.
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DRUG MARKET.

NOTE.—Our prices are for large lots except when otherwise specified, and buyers of small quantities must expect to pay an advance on these figures. Complete prices current will be found on pages 34 and 35.

Saturday Evening, Nov. 8, 1902.

ADVANCED.	DECLINED.
Balsam copaiba, ½c.	Bromides, 5c.
Oil anise, 7½c.	Manna, 5c.
Oil cassia, 12½c.	Quicksilver, ½c.
Valencia saffron, 50c.	Japan wax, ¼c.
Gamboge, 2½c.	Juniper berries, ¼c.
	Serpentaria root, 2c.

☞Hamburg letter on page 41.

Opium.

The market is somewhat firmer, but no alterations have been made in quotations. There was a sale of 50 cases during the week, between importers, at a price said to be $2.70. Outside of this the only business reported has been in single cases and broken lots, principally the latter. Cases are quoted still at $2.72½ and broken lots at $2.77½ @2.80, as to quantity. Cables received in the market here report local rains in the vicinity of Smyrna, but no breaking of the general drought in producing districts. A letter from Smyrna stated that cool and cloudy weather led to the belief that rain was near at hand, but it is evident from the later advices by cable that in this case the wish was father to the thought, or words to that effect. Of course, it is possible that the winter and spring sowings may yield a sufficient crop even if the autumn sowings fail on account of the dry weather. Our own cable advices follow:—

Smyrna, Nov. 7, 1902.

There have been sales of 30 cases at 7s.@ 7s.6d. The market is firm. Arrivals, 4,426 cases.

Constantinople, Nov. 7, 1902.

The market is quiet. Sales have been made of 12 cases druggists' talequale, at 6s.7d@7s., and 24 cases soft at 9s.2d.@9s.9d.

Smyrna, Nov. 7, 1902.

The market closes firm at last quotations, with small sales. Holders refuse to make concessions.

Smyrna, Nov. 8, 1902.

There have been sales of 28 cases at 6s. 5d. @7s. 4d. The market is steady. Arrivals, 4,426 cases.

Our mail advices follow:—

Smyrna, Oct. 17, 1902.

We have to report an active market, with large American and speculative purchases at full rates. The dry weather continues, and it is feared we shall have higher prices should no rain fall until the end of the month. We quote to-day:—New current talequale, 6s.10d.@7s.; new selected talequale, 7s.@7s.2d.; new Yerli, as to quality and conditions, 7s.2d.@8s.; new Karahissar, sightly, selected, 7s.@7s.3d.; new Boghaditz, as to quality, 7s.8d.@8s.2d., per lb., f. o. b. The arrivals to date amount to 4,210 cases, against 2,458 at same period last year.

Constantinople, Oct. 24, 1902.

We were right in supposing that the demand for soft shipping would influence the other qualities. The market was animated, the demand being not only for soft shipping qualities, but for druggists', etc. The sales were as follows:—30 cases druggists' talequale, at 6s.6¾d.@6s.10d.; 6 cases Balukessar, at 7s.1d.; 6 cases Karahissar, at 7s.1d.; 2 cases same, at 7s.2d, and 50 cases soft shipping, at 8s.10d.@10s.8d., as to quality.

Quinine.

Previous to the Amsterdam bark sale on Thursday the market was rather quiet, as is usually the case at such times, and goods were moving only in a small jobbing way. When the cables announced a decline of nearly 12 per cent. at the auction, there were those who looked for an immediate drop in manufacturers' prices. On the other hand, the decline in bark values was not so large as was expected by some people, and in these quarters considerable inquiry developed which finally resulted in some good business. In view of this fact it is hardly likely that makers will reduce their prices at once. Since our last report second hands have modified their views somewhat and German is now offered at 23½@24c. Java is obtainable at 22½@23c. A sale of 15,000 oz. German and Java was made at private terms said to be within the quoted range. Details of the bark sale will be found in an editorial on another page of this issue and, in addition, we have the following cablegrams:—

Amsterdam, Nov. 6, 1902.

The cinchona bark auction to-day went off at an average unit of 6.05 Dutch cents against 6.80 Dutch cents at the last sale. About 76 per cent. of the amount offered sold.

Amsterdam, Nov. 6, 1902.

About three-quarters of the bark offerings sold to-day. The auction went off at an average unit of 6 Dutch cents against 6.75 Dutch cents.

Miscellaneous.

ACID, BENZOIC.—There are no new features to report in connection with the market for benzoic acid. Acid from toluol is still somewhat nominal at 32@34c., owing to competition.

ACID, CARBOLIC.—There has been no change in the situation since our last report. Demand is of average proportions, and prices are unaltered, on the basis of 14½@16c. for drums.

ACID, PYROGALLIC.—Advices from London report a reduction of 1s. 4d. per lb., in the prices of one maker. There has been no change here, quotations remaining as noted in our list of prices current.

ALCOHOL.—The alcohol market is undisturbed by any unusual features, and conditions remain as noted in our last report. Both grain and wood alcohol are in very good demand, and the market is firm on the basis of previous quotations, which are repeated as follows:—Grain, $2.47@2.49; wood, 95 per cent., 65c.; 97 per cent., 75c.

AMMONIUM, BROMIDE.—Manufacturers have announced another reduction of 5c. Prices now range from 44@ 45c. for bulk, the inside figure being for 50-lb. lots.

BAY RUM.—The market is very quiet, but prices are steady at $1.85@ 2.25, as to quality.

BEESWAX.—There is nothing particularly new to report. The market has a fairly steady tone, although there is no active demand. Quotations are repeated without change, as follows:—Yellow, 27½@33c.; white, 39@50c.

BURGUNDY PITCH.—Demand is of small jobbing proportions only, and the market is without new feature. Prices are steady and unchanged upon the basis of previous quotations of 2½ @3c.

CAFFEINE.—Nothing has occurred to alter the condition of the market, which continues somewhat nominal at $3.25@3.50, owing to competition.

CANTHARIDES.—Although there have been no price changes here, the market is very firm, in sympathy with foreign markets. Advices from abroad state that offers are scarce, and quote the equivalent of 62c., laid down, for Russian. Quotations here are as follows:—Chinese, 40@42½c.; powdered, 45 @47½c.; Russian, 62@65c.; powdered, 63 @65c.

CARNAUBA WAX.—The market for carnaubas continues to maintain the firm attitude noted in these columns for some time past. Demand is fairly good, but cannot be called active. Quotations are without change and are repeated as follows:—No. 1, 18½@21c.; No. 2, 16½@18c.; No. 3, 12½@ 15c.

CHLORAL HYDRATE.—Conditions noted in previous reports still prevail. Quotations are nominally unchanged as follows:—Crystals, 90@95c.; crusts, 85@ 90c.

COCAINE.—The tone of the market continues to improve in sympathy with reports from abroad. The cost to import is considerably above the spot quotation of $3.50.

COCOA BUTTER.—Details of the monthly sales will be found in an editorial on another page. As a result of the lower average prices, the market here is easy, and while quotations are nominally unchanged at 29@30c. for bulk, there is little doubt that the inside figure will be shaded.

CODLIVER OIL.—Early in the week there was some little demand, but latterly the market has been dull. Consumers seem to be holding off and buying only from hand to mouth. In spite of this, the market holds very firm in

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sympathy with reports from primary sources, where stocks of new crop oil are extremely low. Prices for the popular brands on spot range from $50@54, as to brand and seller. There is an inquiry in the market for 25 barrels, but we do not hear of its having been filled.

Aalesund, Nov. 8, 1902.

We quote to-day $45 per barrel for prime Lofoten oil, f. o. b. Aalesund.

COLOCYNTH APPLES.—There has been no further change in prices for Spanish colocynths since the advance to 18@19c., noted in our last report. The market, however, is very firm in sympathy with reports from abroad, as is also the market for Trieste colocynths, although prices for this variety have not changed from 38@45c., as to quality.

CUTTLEFISH.—Little news of interest has come from abroad since our last report. Stocks here are light, and the market is firm at former quotations, which are repeated as follows:—Trieste, 20@23c.; jewelers', small, 43@45c.; jewelers', large, 75@80c.

DRAGON'S BLOOD.—Demand is of a routine character, and the market is without an interesting feature. Prices are steady upon the basis of previous quotations, as noted in our list of prices current.

ERGOT.—Hamburg advises higher prices and a very firm market, with upward tendency. This feeling is reflected to some extent in the situation here, but, while some holders are asking 34@35c. for Russian and 35@36c. for Spanish, there are still sellers of both kinds at from 32c. up. Demand cannot be called active.

FORMALDEHYDE.—Moderate quantities are moving into consuming channels at former prices. The market has a fair degree of steadiness, but contains nothing of special interest.

GLYCERINE.—As noted in our reports for some weeks past the market for glycerine is very firm, although there has been no change in prices. Both C. P. and dynamite glycerine are in good demand at the following quotations:—C. P., bulk, 14½@15c.; drums and barrels added; dynamite, 13½c., for carload lots. We have the following correspondence:—

Paris, Oct. 27, 1902.

The activity in this market seems to have ceased for a time. The advances during the past few weeks are not accepted by buyers, although some have paid the prices asked, and it is expected that the lull in business will fix prices at their actual level, although sellers appear to have small stocks. Actual prices are 108@110 frs. for saponification and 88@90 frs. for lye, per 100 kilos, c. i. f., N. Y.

GRAINS OF PARADISE—Very little interest is taken in this article at present. Occasional small jobbing sales bring out a quotation of 15@18c.

GUARANA.—Demand continues slow and the market is easy in consequence, although there has been no quotable change in prices from 70@75c.

HAARLEM OIL.—A fair demand is manifest and the market is firm at $1.95@$2, as to quantity, the inside figure being for 10-case lots.

JAPAN WAX.—Recent arrivals and rather slow trade have caused an easier feeling in the market. Quotations have been reduced to 10¼@10½c., as to quantity. Cables from primary markets report a 10 per cent. advance and state that a lot of wax on board a lighter in Hiogo harbor was sunk. These goods were bought for American account.

LYCOPODIUM.—There is no demand of any account, but the market keeps firm in sympathy with advices from abroad quoting high prices and confirming previous reports of a short crop. On spot unlabeled is quoted at 53½c., and Pollitz at 54@55c.

MANNA.—The market here is easy, although advices from abroad are firmer. Spot quotations are as follows:—Large flake, 55@60c.; small flake, 40@45c.; sorts, 38@40c.

MENTHOL.—Demand has quieted down considerably. While we get no quotation below $7 for spot goods, we are told that $6.75 and maybe less will buy in a small way, and that goods to arrive are obtainable at $6.50. From another source we learn that the import cost is $7.25.

POTASSIUM BROMIDE.—Manufacturers have reduced their prices and now quote 30@31c. for bulk, the lower figure for 100-lb. lots.

QUICKSILVER.—Quotations have been reduced to 64@65c., as to quantity and holder. There is a fair jobbing demand.

SODIUM BROMIDE.—Another 5c. reduction is announced by manufacturers. The range for bulk is now 39@40c., the inside figure being for 50-lb. lots.

ST. JOHN'S BREAD.—Spot stocks of Italian have become very scarce and quotations for goods to arrive have been advanced to 2¾@3c., as to quality and quantity. Advices from primary markets report light supplies.

THYMOL.—The market is very quiet, but there has been no quotable change in prices, which range from $2.20@2.40, as to holder.

Balsams.

Copaiba continues to move well in a jobbing way, with Central American attracting the most attention. Prices for this kind have advanced and quotations now range as follows:—Central American, 38@40c.; Para, 45@50c.; solidifiable, 45@47½c.

Peru is very quiet. While quotations are nominally unchanged at $1.05@1.10, it is intimated that supplies can be had at $1.02½.

The market for tolu holds fairly steady at 32@34c. as to quantity. Demand is slow.

Barks.

There has been no quotable change in prices for Angostura bark, but the market holds firm at 28@30c. as to quantity and holder. Demand is moderate.

Condurango bark is fairly firm at 13@14c. as to quantity in sympathy with strong advices from abroad.

Select elm continues very scarce, and the market holds firm at quotations noted in our list of prices current.

The market for prickly ash bark continues firm on account of scarcity. Quotations range from 9@12c., as to quality and quantity.

Foreign advices report continued scarcity of bayberry bark. The supply on spot is also light, and the market is firm at 6@7c.

Beans.

There is nothing new in the situation as regards the local market for vanilla beans. There has been some demand for jobbing lots, and holders are very firm in their views. Advices from Mexico report that a considerable shortage will result in the vanilla bean crop, owing to a protracted drouth.

Tonka beans are selling fairly well in a jobbing way at unchanged prices. Quotations will be found in our list of prices current.

Berries.

Arrivals of new crop have caused a further decline in prices for juniper berries. Quotations are down to 3½@3¾c.

The market for cubeb berries is dull, and prices are more or less nominal on the basis of previous quotations of 8@9c. for whole.

Essential Oils.

Anise and cassia oils have been the objects of interest this week. There has been considerable activity in both articles, the market for which is very firm and higher. The former has sold up to $1.17½, and $1.20 is now the inside price, with some holders asking $1.25. Cables made the lay-down cost $1.22½ for delivery in three months. As regards cassia, a large business was done at 67½@75c. An inside quotation at present is 80c., with some holders asking 85c. There were sales of 40 cases to arrive at 72½c., and 25 cases on spot at 72½@75c. as to holder.

The market for lavender holds firm at the higher prices noted in our last report, and which will be found in our list of prices current.

There has been no change in the peppermint situation. Holders are very firm in their views and quote $4.75@5 for bulk, and $5@5.25 for H. G. H. Dealers report considerable business this week, but no very important sales. London cables 18s. 9d. for H. G. H.

All of the American oils are very firm, spearmint, tansy, sassafras and wintergreen in particular being in extremely light supply.

There have been no new developments in the situation as regards the Messina essences. The market is firm, but without feature. We have the following correspondence:—

Messina, Oct. 25, 1902.

Oil Lemon.—During the past week quotations were entirely nominal, and prices for spot goods have been persistently cut, notwithstanding the fact that the article is unprofitable at the present figures. As to future deliveries of new oil, although there is nothing in the situation yet to cause an improvement in value, it is nevertheless possible that prices will go higher, as an advance, if kept within reasonable bounds, would be warranted by the circumstances, present quotations being below cost of production. The belief appears to prevail now that prices are bound, sooner or later, to make substantial strides upward.

Oil Sweet Orange.—A strong tone continues to prevail, and the market has an upward tendency. The new oil is freely sold at the current prices, and the fluctuations have so far resulted almost entirely from the natural causes of supply and demand. While there is no immediate prospect of an advance, there is no doubt that a further better demand will induce gradual rise.

Oil Bergamot.—The market here is entirely devoid of interest. Prices show no change whatever, and the demand, such as it is, is wholly of a jobbing character.

To-day's prices range as follows:—Old crop—Lemon, 2s. 4d.; sweet-orange, 5s. 4d.; berga-

mot, 8s.@8s. 3d. per pound. New crop.—Lemon, 2s. 6d.; sweet orange, 5s. 4d.; bergamot, 7s.@7s. 3d. per pound.

Flowers.

The only feature in this department is Valencia saffron, prices for which have advanced since our last report. Advices from abroad have reported a small, late crop, as has been noted in these columns heretofore, and prices there have advanced. This market, however, failed to respond, it being the claim that prices were being held down. Some recent transactions have altered the situation, and sales have been made up to $6.25, which is now an inside quotation. Some holders ask $6.50. Spain quotes the equivalent of $7, laid down here.

Gums.

Purchases of gamboge have been made here this week for London account, and the market is firmer and higher in consequence. Pipe is quoted at 60@62½c.

Cape aloes holds firm at 10c., owing to scarcity, although very little demand is manifest, Curacao aloes, while quiet, is steady at 3@4c.

The extremely light spot supply of chicle restricts business, but keeps the market very firm, as do also advices from Mexico, which state that as a result of prolonged drouth the crop will be less than half an average.

Arabics and tragacanths continue firm, and in demand.

Asafoetida of medium grades finds a moderate but steady outlet at fairly firm prices, ranging from 15@22c., as to quality, and holder.

Herbs and Leaves.

There is little to add to previous reports regarding articles in this department.

Cannabis indica keeps firm in spite of a light demand, on account of previously noted conditions.

Long buchu leaves are practically exhausted on spot, and quotations noted in our list of prices current are wholly nominal. Short buchu leaves continue very scarce and firm, as noted in our last report. Demand is slow.

The market for lobelia herb holds very firm at 7½@9c., on account of scarcity.

Damiana leaves are firmly held, which fact restricts business, owing to the lower views of would-be buyers.

Roots.

Serpentaria is offered a little more freely, and quotations have been reduced to 43@45c.

The senega market is a rather peculiar one. Goods are quoted as low as 57½c., but so far as can be learned, no sales have been made below 62c. The Winnipeg Commercial says:—

Senega.—The market is steady at last week's lower level. Receipts are moderate and there are no new features to note. Best root, well washed and free from bulb, is worth 52c. per pound and the range for better qualities is from 50@52c. delivered, Winnipeg.

Rio ipecac is dull and weak at $1.60 @1.70, and it is understood that less will buy. Cartagena root is nominally unchanged at 90@95c.

Jalap is firm at the advance noted in our last report, the quotation being 11@12c. as to holder. Demand is not active.

Golden seal is offered as low as 52c. A quotation from the country is 51@ 53c. as to quantity and quality.

Gentian is firm at 4@4¼c., on account of scarcity and in sympathy with reports from abroad.

There is a fair consuming demand for Jamaica ginger at unchanged prices.

Seeds.

Canary seed is quiet, but there is a firmer feeling in both Sicily and Smyrna, owing to strong advices from abroad. We have the following cablegram:—

Constantinople, Nov. 7, 1902.

The market for canary seed is rising. We quote 12s. 7d.

Celery seed is selling moderately well at 7½@8c., as to quality and holder.

All grades of mustard seed are in good demand and firm.

Larkspur seed holds firm at 40@45c., in sympathy with reports from abroad.

There has been no further quotable change in prices for lobelia seed since the decline to 45@50c. noted in our last report.

Shellac.

The shellac market holds very firm and a good business has been done during the week. Some grades are very scarce, particularly V. S. O., prices for which have advanced. D. C. is also higher. London declined about 4s. per cwt. this week, but the falling off is believed to be only temporary and the result of bear manipulation. Quotations in this market are as follows:—D. C., 40@42c.; Diamond I., 39c.; V. S. O., 40@42c.; No. 2 Orange, 32@33c.; T. N., 29@31c.; A. C. Garnet, 30@31c.; button, 30@40c.; bleached, 29@39c. Shipments during October were as follows:—

	1902	
	1st half. Cwt.	2d half. Cwt.
To the United States.....	1,400	9,000
To the United Kingdom....	2,900	2,500
To the Continent.....	600	900
Totals	4,900	12,400

	1901	
	1st half. Cwt.	2d half. Cwt.
To the United States.....	.....	7,000
To the United Kingdom....	1,900	1,800
To the Continent.....	1,000	1,700
Totals	2,900	10,500

Spices.

The jobbing business during the week has been very good and prices are firmly held. Pepper has been rather quiet, but offerings were light and the market remained firm. Nutmegs are very firm and some business was done on spot and for forward delivery. Spot stocks, while larger than a year ago, are practically controlled by three interests which also control supplies coming forward. Pimento is rather firmer. Cloves are unchanged.

(Special Letter to the Reporter.)

Hamburg Drug Market.

Hamburg, Oct. 28, 1902.

Our market for the most part has been exceedingly brisk, there being an especially large business in essential oils.

Menthol.—Spot goods have sold at $6.40, while forward delivery is held at $5.66. London sends regular orders to Hamburg at full rates.

Peppermint Oil.—Japanese dementholized is equally firm and rising. Forward shipment is quoted at $2.10. Spot stocks are nearly exhausted.

Russian Aniseed is decidedly stronger, and new seed is held at 4c.

Cantharides are not offered freely, and holders ask high prices. Goods cannot be had below 59½ to 60c.

Japanese Chillies.—Offers for forward delivery are very high, about 10c. being asked. According to samples, the goods are very fine.

Colocynths.—There has been much more inquiry. We hear of about 15 cases sold. Importers ask about 34c.

Fenugreek Seed.—Morocco is very firm. The spot price is 1.90c.

Condurango Bark.—The market has suddenly become very firm on account of unfavorable news from the producing districts. A week ago the price was 6¾ to 7½c., but now 14c. is asked, and it seems likely that the advance will continue.

Wormseed is very scarce, and the market is improving daily. Green seed is held at about 10½c.

Lycopodium is firm on account of the fact that only small quantities are gathered. Spot is pretty scarce. For forward shipment 52½c. is asked.

Ergot.—The cheap sellers are now all sold out and higher prices are asked. About 32c. will lead to business in Spanish or Russian.

Parties desiring to be brought in contact with concerns who offer bargains in machinery are respectfully referred to page 27 of this issue.

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Meeting of the New York Section of the American Chemical Society.

The second meeting of this winter's session of the New York Section of the American Chemical Society was held last Friday evening at the Chemists' Club as usual.

Dr. T. J. Parker presided and the first business taken up was the question as to withdrawal from the Scientific Alliance, which had been laid over from the previous meeting.

After considerable discussion of the matter in which it was strongly brought out that an expenditure of over seven hundred dollars as assessments for Alliance expenses had resulted in no tangible advantage to the chemical society; that no definite plans were in sight for any advantage; and that the expense could not be considered a legitimate use of the society's funds, it was voted by a large majority to withdraw from the alliance. The secretary was instructed to give notice of this action to the officers of the Scientific Alliance. A letter was read from Dr. Charles R. Squibb announcing the presentation to the section of the chemical balance and weights and flasks used by his father, the late Dr. E. R. Squibb, in preparing his celebrated alcoholic specific gravity tables.

The announcement was also made that associate membership had been abolished by the action of the council, and all who had been associates now became full members. It is expected that another section of the society will soon be organized at Cornell University and also one at Pittsburgh.

The following papers were read: "The Determination of Sulphur and Phosphorous in Organic Materials," H. C. Sherman; "The Composition of Cows' Milk," H. C. Sherman; "The Occurrence of Salicylic Acid in Fruits," F. W. Traphagen and Edmund Burke.

Much interest was taken in the question of the natural occurrence of salicylic acid in fruits, but as the amount claimed to have been found does not exceed one milligram per kilogram it will not complicate the testing of preserved fruits and juices for preservatives. Nor has it any apparent importance as effecting the physiological aspect of salicylic acid as a preservative, not only because of the small amount, but it is not considered even to exist as free acid in the fruit.

Notice was given that, owing to postponement of a paper promised for the December meeting, there would be an opportunity to present another, and anyone desiring to do so should notify the secretary or chairman promptly, so as to assure its appearance in the next announcement. It should be noted that the society has cause for congratulation on the large attendance and interest shown at the meetings, and all interested in chemical work will be repaid by attending and hearing the papers read.

Discovery of a New Glucoside, Aucubine.

From the French of MM. Emile Bourquelot and H. Herissey.—Communication to the Academie des Sciences.

Recently one of us described a new process of investigation of the glucosides hydrolyzable by emulsin. This process does not lead to the separation of the glucosides, but surely reveals their presence if they exist. Applied for some time and in a systematic way in the laboratory of the School of Pharmacy, it has enabled us to ascertain that the glucosides in question are more frequent in the vegetable kingdom than generally supposed. In particular, the presence of such a principle has been revealed in the rhizone of Scrophulaire noueuse, in the bark of the birch, in the seeds of Aucuba japonica, etc.

Having recently had considerable quantities of fresh seeds of Acuba at our disposal, we have undertaken to isolate the glucosides. This presented great difficulty; the seeds contain along with the glucoside an enormous proportion of cane sugar, and the extracting liquors, aqueous or alcoholic, containing the two principles in the same proportion as the seed, the direct separation was nearly impossible. It was accomplished by introducing yeast into the aqueous liquid. The cane sugar was inverted, then converted into alcohol and carbonic acid in such a way that the glucoside, unattackable by the yeast, remained alone and could be easily isolated.

Preparation:—The fruit of the Aucuba is a berry formed by a succulent pericarp, covering a seed consisting almost entirely of corneous albumen. The seeds have been separated from the pericarp, then cut up while fresh in boiling alcohol of 90 degrees, in the proportion of about 500 grams of seeds for 2,000 cubic centimeters of alcohol. The mixture has been subjected to reflux boiling for about forty-five minutes; then the alcoholic liquors separated and distilled in the presence of a small quantity of calcium carbonate. The alcohol having been completely removed, the remaining liquid was filtered and then diluted with distilled water so as not to contain more than 12 to 14 per cent. of cane sugar.

The solution thus obtained has been distributed in portions of 500 c.c. in vessels containing a lit r. After sterilization by boiling and cooling, 10 grams of strong yeast have been added to each of the vessels and the fermentation allowed to continue at the temperature of the laboratory (15 to 18 degrees C) until the complete or almost complete disappearance of the sugar (four or five days).

Then a little calcium carbonate has been added and the mixture boiled, cooled and filtered. The liquids have been afterwards decolored by means of bone black, filtered anew, evaporated in part on the water bath, and the evaporation finished in partial vacuum. The product, presenting the appearance of a dry extract, has been boiled with a suitable quantity of alcohol of 98 degrees. After twelve hours of rest the liquid has been filtered into flasks having large openings, and the glucosides soon crystallized. In from 24 to 38 hours the crystallization ended, the crystals were dried with the mercury-blowing machine, washed with alcohol of 95 degrees and dried in sulphuric vacuum. In our different operations, neglecting the product remaining in the mother liquors, we have had an average yield of about 3 grams of glucoside per 100 grams of fresh seeds.

From this first crystallization, provided the decoloration with animal black has been complete, quite a white product can be obtained. It can be readily purified by crystallizing it first in water and then in 80 degrees alcohol.

The following are some of the properties of the glucoside, to which we have given the name aucubine:—

Properties.—Aucubine appears in the form of long crystals, in groups perfectly colorless; it melts at about 181 degrees C. It is very soluble in water, which, hot, dissolves more than its weight, and soluble in alcohol, especially when hot. It has a slightly bitter taste.

Aucubine is levogyrous, like all the glucosides decompozable by emulsin. It does not contain nitrogen; it does not reduce cupro-potassic liquor. It is hydrolyzed by emulsin, and by hot dilute sulphuric acid even much diluted (2 per cent). In this last hydrolysis a reducing sugar is produced, a body of strong and penetrating odor, and a brown principle insoluble in water.

We have been able to isolate the sugar and to obtain it crystallized. This sugar is dextrose—that is to say, the sugar met with so far in the decomposition of all the glucosides hydrolyzable by emulsin.

TRADE ITEMS.

Mr. George E. Reed, manager of the Philadelphia branch of Parke, Davis & Co., was in town during the past week, shaking hands with his many friends in the trade.

The first of the damage suits growing out of the Tarrant fire is on trial before Justice Friedman in the Supreme Court. The case is that of Mrs. Rosa Schuck against Thomas F. Main and others. The plaintiff sues for $25,000 for the death of her son George Schuck, who was employed in the Tarrant Co.'s laboratory.

The fire at the Ray Chemical Company's building, Detroit, on October 31, caused only temporary suspension of operations and necessitated removal to another building. They are now manufacturing at 259 Willis avenue E, where they have ample facilities until their former location is again ready for occupancy.

If you desire to be brought in contact with the makers of machinery which enters into the manufacture of chemicals, drugs, paints, dyestuffs, fertilizers, naval stores, varnish, white lead, cotton oil, linseed oil, lubricating oil, etc., we would respectfully refer you to the Machinery Department of this publication, which you will find on page 23. Any special information that may be desired will be gladly furnished upon application, for we are in a position to place prospective purchasers in direct communication with the manufacturers of machinery of all kinds.

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(Special Correspondence to The Reporter.)

Settlement of the Fleming Borax Case.

Washington, Nov. 7, 1902.

The Treasury Department has finally disposed of the civil case against W. H. Fleming, charged with attempting to defraud the government in connection with certain importations of borax and soda invoiced as washing crystals.

In the court proceedings had upon the criminal charge in this case, the defendant was acquitted on the ground that he had shown good faith by making every reasonable effort to ascertain the dutiable character of the goods he proposed to import, invoicing them in accordance with information he received from officials whose authority he had no reason to question. As heretofore stated in these dispatches, however, the acquittal on the criminal charge did not settle the question as to the illegal character of the importation, and an investigation was ordered to determine whether the facts would justify proceedings to forfeit the importations to the government. The special agents of the department, who are disposed to resolve all doubts concerning the good faith of an importer against him if it will result in the collection of a large amount of duty, reported in favor of forfeiture on the ground that the importer was sufficiently acquainted with the tariff laws to properly invoice the borax and soda as such, and circumstances in connection with the case were cited as supporting the contention that the importer did not act in good faith.

Some weeks ago Mr. Fleming disposed of his interest in the goods in customs custody to the American Express Company, and an offer was then made by that company to pay duty on the importation at the rate prescribed by the tariff act for borax, namely, 5 cents per pound. This offer having been forwarded to the Treasury Department, the Acting Secretary referred it to the United States District Attorney, who, under the date of the 1st inst., wrote to the department as follows:—

"In response to your letter in relation to the alleged fraudulent importation of so-called washing crystals by the American Express Company for W. H. Fleming and asking for an expression of my views and such recommendations as I may desire to make under Section 838, Revised Statutes, on the application of said company by J. B. Wilkinson, attorney, for the release of seven importations of merchandise named, on payment of the duty at the rate of 5 cents per pound, I beg to say I cannot more explicitly state my views of the case than are set forth in my letter of August 28, last, to the Acting Secretary of the Treasury, and I beg to add that I am of the opinion that the proceedings for forfeiture cannot probably be sustained, and I recommend that the offer of J. B. Wilkinson, attorney for the express company, to pay 5 cents a pound on the seven importations be accepted and the goods released."

In this recommendation the collector at New York concurred, being of the opinion that the case against the importer had not been made out by the special agents assigned to it. In view of the acquiescence of both district attorney and collector, the Department decided to accept the offer made and addressed the following communication to the collector:—

"Referring to your letter and other correspondence in relation to the seizure at your port of certain so-called washing crystals imported by the American Express Company for W. H. Fleming, I have to state that the department is in receipt of a letter from the United States district attorney, in which he states that he is of opinion that the proceedings for forfeiture cannot probably be sustained and he therefore recommends that the offer of Mr. J. B. Wilkinson, attorney for the express company, to pay 5 cents a pound on the importations he accepted and the goods under seizure be released.

"As the merchandise appears to be subject to a specific rate of duty and the question of undervaluation is not involved, that portion of it under seizure may be released upon condition that the duty of 5 cents per pound be paid on the six importations made at your port. The importation per "Saxonia" was made at Boston and the collector at that port will receive appropriate instructions."

Under the instructions sent to the collectors at New York and Boston the importations referred to will be promptly released and the case against Mr. Fleming finally closed.

(Special Correspondence to The Reporter.)

Regulations for the Sale of Serums, Etc.

Washington, Nov. 7, 1902.

The supervising Surgeon-General of the Marine Hospital Service, Dr. Walter Wyman, has notified his colleagues on the special board authorized by the act of Congress regulating the sale of viruses, serums, toxins, etc., that a meeting will be held within a few days for the purpose of drafting regulations for the enforcement of the law, and specially providing for a system of inspection of the plants of manufacturers of these articles. Dr. Wyman's colleagues are the Surgeons-General of the army and navy, but the work of preparing the preliminary draft of the regulations will be performed in the office of the Surgeon-General of the Marine Hospital Service. The section of the law under which the regulations are to be drafted is as follows:—

"That the Surgeon-General of the Army, the Surgeon-General of the Navy, and the Supervising Surgeon-General of the Marine-Hospital Service be and they are hereby constituted a board with authority, subject to the approval of the Secretary of the Treasury, to promulgate from time to time such rules as may be necessary in the judgment of said board to govern the issue, suspension, and revocation of licenses, for the maintenance of establishments for the propagation and preparation of viruses, serums, toxins, antitoxins, and analogous products, applicable to the prevention and cure of diseases of man, intended for sale in the District of Columbia, or to be sent, carried, or brought for sale from any State, Territory, or the District of Columbia, into any other State, Territory, or the District of Columbia, or from the United States into any foreign country, or from any foreign country into the United States: Provided, That all licenses issued for the maintenance of establishments for the propagation and preparation in any foreign country of any virus, serum, toxin, antitoxin, or product aforesaid, for sale, barter, or exchange in the United States, shall be issued upon condition that the licentiates will permit the inspection of the establishments where said articles are propagated and prepared, in accordance with section three of this act."

It will noted that the regulations to be issued by this board are subject to the approval of the Secretary of the Treasury, and it is further provided in section 5 that "the Secretary of the Treasury be and he is hereby authorized and directed to enforce the provisions of this act and all such rules and regulations as may be made by authority thereof; to issue, suspend and revoke licenses for the maintenance of establishments aforesaid; and to detail for the discharge of such duties such officers, agents and employes of the Treasury Department as may in his judgment be necessary."

This wide scope of authority granted to the Treasury Department has aroused considerable interest in the question as to what bureau of the department would be charged with the enforcement of the law, and the erroneous statement has heretofore been made that the Commissioner of Internal Revenue would be assigned to this task because of the elaborate organization of his bureau for the purpose of administering the tax laws. The Reporter's correspondent is authoritatively informed, however, that all matters pertaining to the enforcement of this law will be placed under the exclusive jurisdiction of the Supervising Surgeon General of the Marine Hospital Service, which is a branch of the Treasury Department. Secretary Shaw believes that the law can be more intelligently enforced by one of the scientific bureaus of the department than by one clothed with purely administrative functions; and in view of the fact that Dr. Wyman is a member of the board authorized by Congress to draft the regulations it has been thought especially appropriate to select him as president of the board and to put him in charge of all matters pertaining to the enforcement of the law.

The health officer of the District of Columbia, who in the bill as originally introduced in Congress was named as a member of the board, has written a letter in which he points out some of the reasons why the inspection of manufacturers' plants should be rigid and why it would not be practicable to confine the inspection to finished products after they are placed on the market. He says in part:—

"This law seeks, as indicated by its title, to regulate the manufacture and sale of certain substances of animal origin which, except vaccine virus, have but recently come into general use for the prevention and cure of disease. The purity of these substances is of far more importance than is the purity of ordinary drugs, because the former are ordinarily introduced into the circulation directly while the latter are introduced through the digestive tract.

"A dose of an antitoxin, for instance, once administered, is beyond recall even immediately after administration; a remedy given by the mouth can be removed or neutralized by mechanical or therapeutic means. The potency of these remedies is of corresponding importance. They are not given in repeated small doses, in which case therapeutic inactivity could readily be discovered and corrected, but are used in full doses with the expectation, or at least with the hope, that it will not be necessary to administer them again. If the first dose proves worthless the loss of time may cost the life of the patient.

"The manner in which these substances are produced and marketed renders it impossible to exercise efficient control over them by any system of inspection which takes cognizance only of the finished product. Efforts to insure their purity must be directed to the establishments where such products are manufactured. Here, however, difficulty is encountered because, except in a very few instances, the State in which the material is used has no jurisdiction over the establishment at which it was produced. Such materials are used in every State and Territory, while the places of manufacture are located in probably but five or six. While the State in which such material is produced may exercise control over the manufacture of these products, yet no instance is known in which it has done so.

"In the District of Columbia there are no establishments for the manufacture of these materials, but there is no legal reason why any person whosoever should not enter into the business at any time. Neither is there in this district any restriction upon traffic in these articles. The law will provide the necessary machinery for safeguarding generally the health, and lives of citizens of the Dis-

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trict of Columbia, and for safeguarding from danger, liable to arise from interstate or international commerce, the lives and health of citizens of the United States, with reference to the propagation and sale of viruses, therapeutic serums, toxins, antitoxins, and analogous products."

It is fortunate, from the manufacturers' standpoint, that Dr. Wyman has been placed at the head of the board to provide for the execution of this somewhat peculiar law. His attitude toward manufacturers has been exceedingly friendly, and he may be relied upon to see that no impracticable requirements are incorporated in the forthcoming regulations. In speaking of the matter to the Reporter's correspondent, he said:—

"We have not made sufficient progress in the drafting of regulations to undertake to discuss them in detail, but I am free to say that I take up this work not only without any prejudice against the manufacturers of these products but with a high admiration for the splendid work they have done and especially for the scrupulous care and scientific accuracy with which their goods have been prepared. Probably no branch of the Government is more familiar with the products of the leading drug houses of the country than the marine-hospital service, and we are quite ready to testify to the high grade of the goods usually supplied to us and to the business-like methods and strict integrity of the manufacturers from whom we obtain them. I take it for granted our regulations will provide for the inspection of the plants of all firms to which licenses are issued, and while this inspection will be as rigid as is necessary there will be nothing inquisitorial about it, and I have no doubt that the relations of the bureau with these manufacturers will continue to be as satisfactory in the future as they have been in the past."

It is expected that the new regulations will be ready for promulgation within a few weeks, and that they will take effect about January 1, next.

(Special Correspondence to the Reporter.)

Petroleum as Fuel in the Navy.

Washington, Nov. 7, 1902.

The Bureau of Steam Engineering of the Navy Department is in receipt of many inquiries for additional information regarding tests of liquid fuel, which have recently been made by the Edwards Board, and especially for data regarding the burning of California oil. The oil used in the tests made in this city, which were fully described in the board's report published in these columns a fortnight ago, was from the Beaumont field and was refined to such an extent that the sulphur content was reduced from 1.63 to 0.50 per cent. In a recent supplemental test, made on board the steamship Mariposa, running from San Francisco to Tahiti, which was supervised by Lieutenant Winchell, U. S. N., California oil was used and the attention of inquirers is being called by the bureau to the results secured.

The chemist of the Navy Department at the New York yard submitted the following report upon the sample of the Kern river district oil used on the Mariposa:—

"The sample is practically free from low boiling naphtha, as on distillation only a small percentage passed over below 150 degrees C., and less than 10 per cent. below 225 degrees C. A boiling point above 360 degrees C. was reached before the second 10 per cent. was collected.

"It shows on ultimate analysis the following composition:—

	Per Ct.
Carbon	84.43
Hydrogen	10.99
Nitrogen	.65
Sulphur	.59
Oxygen	3.34

"This gives a calorific value, by Dulong's formula, of 18,806 B. T. U. The specific gravity at 60 degrees F. is 0.962. Flash point, 228 degrees F. Fire point, 258 degrees F. Vaporization point, 178 degrees F. Loss for six hours at 212 degrees F., 12.01 per cent."

It will be noted that the sulphur content was 0.59, as compared with 0.50 in the Beaumont oil. With regard to the efforts made to prevent the collection of explosive gases in the tanks on shipboard, Lieutenant Winchell says:—

"There are no precautions other than those usually taken on board ship to guard against fire or explosion. All spaces to which oil has access are well ventilated by both inlet and outlet ducts. The oil is a thick, dark fluid, like molasses, and in the open air burns slowly, giving off much smoke. But it gives off volatile gases which form explosive mixtures with air, tanks empty or nearly so being more dangerous than full ones in this respect. The ship is electrically lighted, but in addition an open hand lamp is burning in the fire room all the time to light the burners; the firemen smoke on watch, and the oil is treated no more tenderly than if it were coal. On the run back, the cargo of copra was stored all about the expansion trunk, which projects 4½ feet between decks, completely covering the tanks and making them inaccessible for examination."

Referring to suggestions made before these tests that the temperatures would be too high for the endurance of the firemen, the report says that "the temperatures of fire rooms seem to be about what one would expect in coal burning, but the temperatures of the uptake and smoke-pipe gases run high, the maximum being 925, which shows an undue loss of heat here." No discomfort was suffered by the firemen. The temperature of the oil in the settling tanks ranged between 68 deg. and 100 deg. F. on the trip out, and between 90 deg. and 108 deg. F. on the trip back. With regard to the work of feeding the oil, starting fires, etc., the report says:—

"The work of the firemen would be even easier than it is and better results attained if the oil and air pressure is kept constant and the heated temperature of the oil constant. The apparatus then, once properly adjusted, would need very little change. To get these results is a mere matter of detail easily arranged. If the temperature of the oil rises it feeds more freely and a readjustment is necessary, and the same conditions hold with regard to the pressure.

"It will be noticed that in addition to the independent oil and air supply valves the burners are fitted with an air-plug cock and an oil-plug cock connected to one lever, which then controls both air and oil supply, enabling the operator to shut them both off at once in emergency. At first when steam went up too high and a burner was shut down this lever was used; but shutting off the air thus gave the air compressor less work, and as its governor is not sensitive the air pressure increased, making a readjustment of all oil and air supply valves necessary, with consequent smoke. Later on, when it was desirable to shut down a burner, the oil alone was shut off by the independent feed valve on the burner, and the untouched air valve kept the air compressor's work more nearly constant; then when the burner was again required, the oil valve was opened and immediately lighted from the flame of the adjacent burner.

"In starting fires with everything cold, steam is raised on the auxiliary boiler, which burns coal, and the air compressor, oil pumps, and oil heater are started. The oil is lighted by inserting oil-soaked rags in the air space surrounding the burner and touching a lamp to them, or an arrangement like a gas lighter may be used.

"Sometimes when the air pressure is too high, or insufficient oil is feeding, the flame flickers and may go out. If the oil is kept feeding under these conditions, on relighting there is a small explosion of the gases in the furnace, with a momentary back draft through the peepholes and ash pans."

Much curiosity has been expressed as to the method by which the California oil has been atomized, and Lieutenant Winchell gives the following statement on this point:—

"In the Grundell-Tucker burner the oil, heated by a steam coil under boiler pressure throttled down, passes through the inside pipe and is thrown out radially through the series of small holes. The air, first heated by compression up to 20 pounds, is further heated to a temperature of about 350 degrees F. in the air chamber surrounding the burner, and called the air superheater. Air can be used at the temperature at which it leaves the compressor, and was so used on the trip down. This air under the pressure of about 20 pounds surrounds the oil pipe in the burner and passes axially along the pipe until near the end, where it is given a whirling motion through small helical passages arranged like the rifling of a gun. It crosses axially and whirling through the fine oil streams spurting radially from the end of the burner, breaking up the oil into fine spray, the drops of which can be seen before they ignite. A further air supply (cold) is admitted through the hinged door of the ash pan, and is directed up across the path of the flame and heated also by a curved fire-brick wall built in the ash pan close to the front."

Generally speaking, the results secured on this trip were such as to satisfy the board that the efficiency of the California oil is approximately the same as that from the Beaumont field.

(Special Correspondence to the Reporter.)

Petroleum on Public Lands.

Washington, Nov. 7, 1902.

The notable progress made in the development of the California oil fields emphasizes the importance of a movement which the Commissioner of the General Land Office has again undertaken to protect the rights of oil prospectors on the public lands of the Pacific Coast. With the convening of Congress Commissioner Hermann will urge upon both Houses the importance of prompt legislation and his efforts will be supplemented by Senator Bard, of California, who is now in possession of a bill drafted by the Commissioner and carefully designed to provide the necessary remedy.

The present unsatisfactory conditions with reference to the oil lands of California arise from the decision of the court in the now famous case of the Kern Oil Company et al. vs. Clarke, in which it was held substantially that parties holding scrip entitling them to take up agricultural land might use it for the purpose of entering property upon which oil prospectors were at work, provided no actual discovery of oil had been made. The official syllabus of this decision is as follows:—

"A person making selection under the act of June 4, 1897, who has complied with all the terms and conditions necessary to entitle him to a patent to the selected land, acquires a vested interest therein and is to be regarded as the equitable owner thereof.

"The right to a patent under said act, once vested, is, for most purposes, the equivalent to a patent issued; and when in fact issued, the patent relates back to the time when the right to it became fixed and takes effect as of that date.

"Questions respecting the class and character of the selected lands are to be determined by the conditions existing at the time when all requirements necessary to obtaining title have been complied with by the selector, and no change in such conditions, subsequently occuring, can affect his rights.

"The Land Department has the jurisdiction and power, either of its own motion or at the instance of third parties, at any time before patent is issued, and after appropriate notice, to institute and carry on such proceedings as may be necessary to enable it to determine whether the selected lands were of the requisite class and character, and whether the selection was in other respects regular and in conformity with the requirements of the act. But the determination must relate to the time when the selector has done all that is required of him in order to perfect his right to a patent."

The practical application of this decision has been most disastrous to all prospectors. In numerous cases they have spent considerable money in determining promising localities for the sinking of oil wells and for the boring of the wells themselves, only to be ousted by other parties entering the lands for alleged agricultural purposes. It will be noted that in considering the claim of the party making selection the Land Office, in determining whether the land is agricultural or not, is bound by the recognized character of the lands on the date when the entry was made. Thus, land claimed to be agricultural must be patented as such to any claimant entering same up to the moment of the discovery of oil thereon, although prospectors may have been at work upon the land for many months and may actually have discovered oil after the date of the agricultural entry. Unscrupulous parties are alleged to have taken advantage of this decision to enter lands upon which prospectors were at work and upon which oil was discovered in large quantities almost immediately thereafter.

The only temporary remedy for this state of affairs which the Commissioner of the General Land Office has been able to apply has been to suspend such lands from agricultural entry. This is far from satisfactory, however, for the reason that such suspension must continue until the desired legislation is secured; and hence mineral patents cannot be granted to bona fide prospectors who have made discoveries of oil in commercial quantities. Senator Bard, of California, who is co-operating with the Commissioner, and who some time ago drafted a bill intended to meet the present situation, has decided to accept the substitute drawn by the Land Office, which provides as follows:—

"That any person or association of persons authorized to enter lands under the mining laws of the United States may enter and obtain patent to lands containing petroleum or other mineral oils, and chiefly valuable therefor, under the provisions of the laws relating to placer mineral claims; provided, that the locators of placer-mineral claims believed to contain petroleum or other mineral oils shall have three months from and after the making of their claims on the ground within which to begin work for the purpose of completing discovery, and such discovery, when made while working the claim with reasonable diligence, shall relate back and have effect nunc pro tunc as though made before or at the time of marking the claim on the ground. No adverse rights to any part of the claim can be acquired by other parties within said period of three months, nor thereafter, while work thereon is being prosecuted with reasonable diligence; but failure to prosecute work for six months or complete such work of discovery within twelve months from the date of marking the claim on the ground, shall be considered as an abandonment of the claim, and failure to begin work within said period of three months shall work a forfeiture of the claim."

The bill above quoted would give the oil prospector the same rights that parties desiring to enter agricultural lands now enjoy. He would be able to pre-empt a section of land and to prospect thereon without fear of the counterclaims of any other persons provided his work was carried on with reasonable diligence, and in all cases he would have one year from the date of marking off his claim within which to make a discovery. It is reasonable to assume that if no discovery were made within that period no rival claimant would be apt to contest his right to continue work for a longer period.

The Land Office is advised that there is a strong disposition in both Houses to give prompt consideration to Senator Bard's bill and to such other legislation relating to oil deposits on the public lands as is involved in the bill introduced during the last session by Representative Sutherland of Utah, and a similar measure drafted by Senator Stewart of Nevada. These bills come under the joint jurisdiction of the Committees on Public Lands and Mines and Mining of the two Houses, but the last named committees will be charged with whatever investigation is regarded as necessary to be made before the measures can be acted upon.

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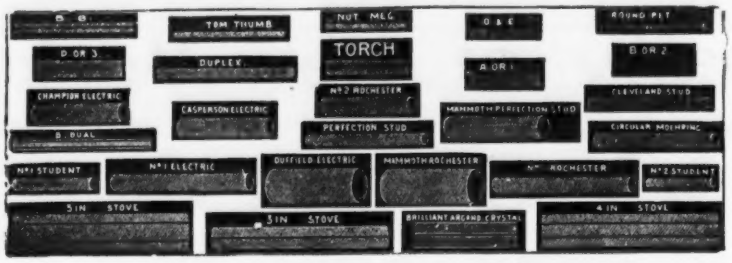

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Tiffin, Ohio, Nov. 10, 1900.

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(Signed) Crobaugh & Dahm Hardware Co.

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Genoa, O., Nov. 21, 1900.

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OXALLIC—29 cks, 21,826 lbs, Chemical Imp Mfg Co, Finland, Antwerp
PYRO—5 cs, Berlin Aniline Works, Patricia, Hamburg
AGAR AGAR—1 bbl, Lehn & Fink, Patricia, Hamburg
ALBUMEN, EGG—18 cs, 1,976 lbs, H Kohnstamm & Co, Moltke, Hamburg
7 cs, 1,508 lbs, Am Express Co, Hanover, Hamburg
16 cs, 1,978 lbs, R W Phair & Co, Burgundia, Marseilles
ALIZARINE—58 pkgs, Farb of Elberfeld Co, Rotterdam, Rotterdam
102 cks, Farb of Elberfeld Co, Finland, Ant
AMBERGRIS, 1 cs, 28 ozs, Dodge & Olcott, Philadelphia, Southampton
AMMONIA, CARB—100 kgs, 11,200 lbs, Schoellkopf H & H Co, Celtic, Liverpool
10 cks, 5,600 lbs, J L & D S Riker, Celtic, Liverpool
SULPH—200 bgs, 44,800 lbs, W H Mitchell, Rosalind, Sydney
241 bgs, 56,600 lbs, Parsons & Petit, Celtic, Liverpool
ANILINE COLORS—77 cks, V Koechl & Co, Rotterdam, Rotterdam
7 cks, C Bischoff & Co, Finland, Antwerp
134 pkgs, Farb of Elberfeld Co, Finland, Antwerp
91 pkgs, Kutroff, Pickhardt & Co, Finland, Antwerp
7 pkgs, Bailey, Rodgers & Co, Finland, Ant
5 pkgs, Heller & Merz Co, Finland, Antw'p
6 cks, Geisenheimer & Co, Rotterdam, Rdam
11 cks, J Campbell & Co, Rotterdam, Rdam
591 cks, Cassilla Color Co, Rotterdam, Rotterdam
18 cks, V Koechl & Co, Finland, Antwerp
89 pkgs, A Klipstein & Co, Finland, Antw'p
120 pkgs, V Koechl & Co, Rotterdam, Rdam
1 ck, Oakes Mfg Co, Finland, Antwerp
2 cks, N Y & B Dyewood Co, Finland, Ant
7 bbls, J Campbell & Co, Finland, Antw'p
2 cks, Oakes Mfg Co, Rotterdam, R'dam
23 cks, F Bredt & Co, Finland, Antwerp
29 cks, J J Keller & Co, Finland, Antwerp
6 cks, A Klipstein & Co, Canadian, L'pool
225 pkgs, Farb of Elberfeld Co, Finland, Antwerp
76 pkgs, Berlin Aniline Works, Patricia, Hamburg
SALT—40 cks, C Bischoff & Co, Finland, Ant
ANTIMONY—25 cs, 5,542 lbs, A U Andrus & Co, Moltke, Hamburg
100 cks, 67,200 lbs, E Hills Son & Co, Mesaba, London
ARCHIL—8 cks, J Campbell & Co, Saxonia, Liverpool
ARGOLS—46 cks, 46,000 lbs, C Pfizer & Co, Burgundia, Marseilles
48 cks, 60,494 lbs, C Pfizer & Co, Burgundia, Marseilles
1,162 pkgs, 417,696 lbs, Tartar Chem Co, Burgundia, Marseilles
794 bgs, 177,361 lbs, C Pfizer & Co, Celtic, Liverpool
380 bgs, 169,176 lbs, C Pfizer & Co, Celtic, Liverpool
22 cks, 21,934 lbs, Am Tartar Co, Beeswing, Bordeaux
ARSENIC—100 cks, Roessler & H Chem Co, Hanover, Hamburg
338 cks, 112,299 lbs, F W Devoe & C T Raynolds Co, Burgundia, Marseilles
101 cks, V Koechl & Co, Finland, Antwerp
BARIUM—80 cks, Kuttroff, Pickhardt & Co, Rotterdam, Rotterdam
CARB—20 bbls, Schoellkopf H & H Co, Finland, Antwerp
BINOXIDE—23 cks, 22,400 lbs, Drevet Mfg Co, Rotterdam, Rotterdam
BAY LEAVES—152 bls, L W & P Armstrong, Talisman, Guadaloupe
BLEACHING POWDER—104 bbls, 89,031 lbs, F A Richard, Finland, Antwerp
158 cks, 172,092 lbs, J L & D S Riker, Celtic, Liverpool
49 cks, 51,060 lbs, Fuerst Bros & Co, Finland, Antwerp
BONE BLACK—25 cks, 8,250 lbs, F Schroeder & Co, Rotterdam, Rotterdam
BRIMSTONE—400 tons, Fuerst Bros & Co, Balilla, Licata
2,000 tons, A S Malcomson, Balilla, Licata
1,050 tons, Parsons & Petit, Balilla, Licata
BRISTLES—17 pkgs, 2,480 lbs, T C Pollock, Philadelphia, London
18 pkgs, 2,011 lbs, Wells Fargo & Co, Philadelphia, London
6 cks, 2,913 lbs, F W Von Stade, Patricia, Hamburg
BRONZE POWDER—8 cs, 2,881 lbs, G Benda, K Wm der Grosse, Bremen
BUTTON LAC—21 chts, Hoople & Androvette, Minnehaha, London
300 cs, Rogers & Pyatt, St Paul, London
CAMPHOR—620 tubs, Arlington Mfg Co, Kentmere, Kobe
CASSIA—744 bls, J Kissock & Co, Asama, Singapore
500 cs, J Kissock & Co, Asama, Singapore
180 bgs, 13,800 lbs, Frame, Alston & Co, Lennox, Singapore
CELERY SEED—30 bls, 6,614 lbs, D R James & Bro, Burgundia, Marseilles
CHALK—200 tons, J F Whitney & Co, Oscar II, Milano
PRECIP—5 cks, Merck & Co, Philadelphia, Southampton
10 cks, 2,999 lbs, R W Phair & Co, Rotterdam, Rotterdam
CHAMOMILES—5 bls, Lehn & Fink, Kensington, Antwerp
CHEMICAL COMP—86 pkgs, Merck & Co, Rotterdam, Rotterdam
24 cs, E Levi, Rotterdam, Rotterdam
5 cs, Merck & Co, Philadelphia, Southampton
10 cs, E Levi, K Wm der Grosse, Bremen
PREP—3 cks, Roessler & H Chem Co, Hanover, Hamburg
11 cs, V Koechl & Co, Rotterdam, Rotterdam
2 cs, Lehn & Fink, Blucher, Hamburg
7 pkgs, Lehn & Fink, Patricia, Hamburg
SALT—4 cs, Lehn & Fink, Blucher, Hamburg
CHINA CLAY—23 tons, International Ultramarine Co, Canadian, Liverpool
60 cks, 30 tons, J Knight & Co, Canadian, Liverpool
510 cks, 205 tons, Perkins, Goodwin & Co, Canadian, Liverpool
CLOVES—250 bls, 31,880 lbs, Frame, Alston & Co, Philadelphia, S'h'ton
1,000 mats, 12,980 lbs, Frame, Alston & Co, Philadelphia, S'h'ton
CINCHONIDIA—10 cs, 10,000 ozs, Schieffelin & Co, Cassel, Bremen
CINNAMON—100 bls, 16,000 lbs, R Crooks & Co, Lahn, Genoa
CIVIT—1 cs, 151½ ozs, Dodge & Olcott, Philadelphia, S'h'ton
COAL TAR PREP—8 cks, C Georgi, Rotterdam, Rotterdam
24 cks, 1 cs, Cassella Color Co, Rotterdam, Rotterdam
5 cs, Berlin Aniline Works, Patricia, Hamburg
COCA LEAVES—58 bls, 7,949 lbs, Schieffelin & Co, Allianca, Colon
70 bls, 9,988 lbs, McKesson & Robbins, Allianca, Colon
COCOA BUTTER—50 cs, 5,000 lbs, R Crooks & Co, Mesaba, London
COLORS—9 pkgs, 961 lbs, A W Smith, Rotterdam, Rotterdam
18 cs, C Helmuth, Rotterdam, Rotterdam
3 cs, J Marsching & Co, K W der Grosse, Bremen
3 pkgs, Roony & Spence, Mesaba, London
61 cks, C F Zentgraf, Patricia, Hamburg
1 cs, A Keppelmann, Patricia, Hamburg
CORKS—15 bls, 1,819 lbs, L Mundet & Son, Burgundia, Marseilles
CORKWOOD—1,865 bls, 286,398 lbs, Armstrong Cork Co, Bonn, Lisbon
805 bls, Gudewell & Bucknall, Bonn, Lisbon
DEXTRINE—100 bgs, 21,660 lbs, F Behrend, Xenia, Stettin
25 bgs, 5,428 lbs, C Morningstar & Co, Xenia, Stettin
DIVI DIVI—16 bgs, 1,760 lbs, De Sola, Lobo & Co, Prins der Nederlanden, Curacao
74 bgs, 6,709 lbs, Foulke & Co, Prins der Nederlanden, Curacao
71 bgs, 7,700 lbs, Foulke & Co, Prins der Nederlanden, Curacao
DRAGONS BLOOD—2 cs, 282 lbs, McKesson & Robbins, Philadelphia, Southampton
DRUGS—2 bgs, Lehn & Fink, Blucher, Hbg
14 cs, Lehn & Fink, Patricia, Hamburg
34 bgs, Lehn & Fink, Blucher, Hamburg
4 bls, Lehn & Fink, Patricia, Hamburg
EGG YOLK—167 cs, 18,722 lbs, A Klipstein & Co, Hanover, Hamburg
ETHEL, CHLO—4 cs, 133 lbs, T Leeming, Mesaba, London
FENNEL SEED—2 bls, Lehn & Fink, Blucher, Hamburg
1 bl, Lehn & Fink, Patricia, Hamburg
FISH SOUNDS—4 cs, 1,033 lbs, Stallman & Fulton Co, Philadelphia, London
FORMALDEHYDE—170 carboys, Roessler & H Chem Co, Mesaba, London
FRANKFORT BLACK—4 pkgs, C Wix & Co, Rotterdam, Rotterdam
FULLERS EARTH—650 bgs, 65 tons, L A Salomon & Bro, Philadelphia, Hamburg
FUSTIC—286 pcs, 99,000 lbs, L N Chemidlin & Co, Santiago, Tampico
3,030 lbs, H Marquardt & Co, Santiago, Tampico
5 tons, Thebaud Bros, New York, San Domingo
143,000 lbs, E N Tibbals, Santiago, Tampico
GALLS—58 cs, Fuerst Bros & Co, Asama, Shanghai
43 cs, F Bredt & Co, Lennox, Shanghai
GAMBIER—2,208 bls, 446,486 lbs, L Littlejohn & Co, Atholl, Singapore
1,015 bls, 224,770 lbs, L Littlejohn & Co, Atholl, Singapore
514 bls, 108,927 lbs, C von Pustau & Co, Asama, Singapore
2,672 bls, 555,940 lbs, J W Recknagel & Son, Asama, Singapore
GELATINE—21 cs, 2,456 lbs, P Puttmann, Rotterdam, Rotterdam
25 cs, 4,014 lbs, Halbicht, Braun & Co Rotterdam, Rotterdam
GINGER—75 bbls, 9,891 lbs, Stallman & Fulton Co, Philadelphia, London
GLASS, PLATE—10 cs, Zahn & Bowley, Rotterdam, Rotterdam
7 cs, Semon, Bache & Co, Br Princess, Ant
9 cs, J Fitzpatrick & Co, Br Princess, Ant
WINDOW—2,373 cs, Van Horne-Griffin Co, Br Princess, Antwerp
792 cs, Semon, Bache & Co, Br Princess, Antwerp
586 cs, R S Morison, Finland, Antwerp
1,107 cs, Zahn & Bowley, Finland, Antwerp
1,160 cs, T Morris & Co, Finland, Antwerp
GLUE—25 bls, 5,511 lbs, A Holthusen, Hanover, Hamburg
25 cs, 19,945 lbs, S Isaacs & Co, Rotterdam, Rotterdam
25 bls, 2,756 lbs, F A Reichard, Burgundia, Marseilles
200 bgs, 22,400 lbs, Diamond Match Co, Mesaba, London
GLYCERINE—80 dms, 101,289 lbs, Marx & Rawolle, Mesaba, London
REFINED—117 cs, 13,928 lbs, American Trading Co, Hughenden, Callao
GREASE—25 bbls, A de Ronde & Co, Celtic, Liverpool
WOOL—100 cks, 37,455 lbs, A Klipstein & Co, Trinidad, Antwerp
15 cs, V Koechl & Co, Patricia, Hamburg
GUM—20 cs, McKesson & Robbins, Philadelphia, Southampton
ALOES—70 cs, 8,253 lbs, Foulke & Co, Prins der Niderland, Curacao
ARABIC—102 pkgs, 87,433 lbs, E J Arbib & Co, Celtic, Liverpool
91 pkgs, 33,135 lbs, E J Arbib & Co, Saxonia, Liverpool
ASAFETIDA—56 pkgs, 3,844 lbs, Stallman & Fulton Co, Mesaba, London
BENZOIN—1 cs, Lehn & Fink, Patricia, Hbg
CHICLE—18 bgs, 3,422 lbs, American Trading Co, Santiago, Tuxpan
6 bgs, 1,058 lbs, L N Chemidlin & Co, Santiago, Tuxpan

A. Klipstein & Company
122 Pearl Street, NEW YORK
CHEMICALS AND DYESTUFFS
AGENTS FOR.
ANILINE COLORS
Made by the Society of Chemical Industry BASLE.
CHLORATE OF POTASH
BRANCH HOUSES:
BOSTON, 283-285 Congress St. PHILADELPHIA, 50-52 N. Front St. CHICAGO, 156 Kinzie St.
PROVIDENCE, R. I., 18 Mathewson St.
HAMILTON, ONT., Catharine St. MONTREAL, 17 Lemoine St.

38 bls, 3,672 lbs, Eggers & Heinlein, Coastwise, New Orleans
COPAL—550 cs, 121,562 lbs, E Hills' Son & Co, Verona, Singapore
18 cks, 4,000 lbs, A Mason, Philadelphia, Hamburg
100 cs, 22,244 lbs, J W Phyfe & Co, Lennox, Singapore
288 pkgs, 53,304 lbs, L C Gillespie & Son, Rotterdam, Rotterdam
80 cs, R Brauss & Co, Lennox, Kobe
GUAIAC—6 cs. 550 lbs, J W Wilson & Co, Prins der Nederland, Port au Prince
TRAG—50 cs, David E Green & Co, Bovic, Liverpool
23 cs, Thurston & Braidich, Bovic, Lpool
HOREHOUND—10 bbls, Parke, Davis & Co, Moltke, Hamburg
INDIGO—200 cks, 87,306 lbs, Kuttroff, Pickhardt & Co, Finland, Antwerp
20 cks, V Koechl & Co, Rotterdam, Rotterdam
8 seroons, Silva Buessenius & Co, Allianca, Colon
6 chts, 1,357 lbs, E R Durkee & Co, Philadelphia, Southampton
AUX—11 cks, Fuerst Bros & Co, Finland, Antwerp
IODINE—230 kgs, Watjen, Toel & Co, Allianca, Colon
KAINIT—1,566,646 lbs, P Weidinger & Son, Milano, Hamburg
KRYOLITE—18 cks, Roessler & H Chem Co, Br Princess, Antwerp
LICORICE—
ROOT—145 bls, 44,690 lbs, G W Sheldon & Co, Georgia, Smyrna
50 bbls, 19,800 lbs, R Hillier's Son Co, Celtic, Liverpool
56 cs, 8,211 lbs, Frame, Alston & Co, Philadelphia, Southampton
OCHRE—200 cks, 147,488 lbs, F A Reichard, Burgundia, Marseilles
50 cks, 36,052 lbs, F A Reichard, La Gascogne, Havre
175 cks, 134,052 lbs, J W Coulston & Co, Burgundia, Marseilles
OIL, ALMOND—2 cs, R W Phair & Co, Rotterdam, Rotterdam
3 cs, 480 lbs, J B Horner, Mesaba, London
COCOANUT—89 bbls, 40,135 lbs, Oil Seeds Pressing Co, Cassel, Bremen
CROTON—5 cs, 500 lbs, A A Stilwell, Philadelphia, Southampton
ESSL—23 cs, Euler & Robeson, La Savoie, Havre
4 cs, G Lueders, K Wm der Grosse, Bremen
33 pkgs Euler & Robeson, Lahn, Genoa
2 cs A Giese & Son, Patricia, Hamburg
1 cs, Lehn & Fink, Blucher, Hamburg
1 cs, Lehn & Fink, Patricia, Hamburg
FUSEL—17 cks, 5,728 lbs, T Hofacker, La Gascogne, Havre
18 cks, 21,473 lbs, Maas & Waldstein, Hanover, Hamburg
11 cks, 12,352 lbs, Schoellkopf H & H Co, Hanover, Hamburg
5 cks, 5,520 lbs, Maas & Waldstein, Rotterdam, Rotterdam
18 cks, 21,473 lbs, Maas & Waldstein, Hanover, Hamburg
NUT—996 cks, 331,702 lbs, E Hills, Son & Co, Verona, Shanghai
145 cks, 55,993 lbs, C von Pustau & Co, Asama, Shanghai
204 cks, 80,473 lbs, American Trading Co, Asama, Shanghai
100 bgs, 24,000 lbs, Smith & Nichols, Patricia, Hamburg
PAINT—94 dms, Water Paint Co, Burgundia, Marseilles
PALM STEARINE—56 bbls, 22,445 lbs, W A L Vogt, Canadian, Liverpool
236 bbls, W A L Vogt, Burgundia, Marseilles
PEPPER—603 bgs, 66,500 lbs, Czarinkow, McDougal & Co, Atholl, Singapore
1,970 bgs, 276,640 lbs, L Littlejohn & Co, Atholl, Singapore
306 bgs, 42,929 lbs, L Littlejohn & Co, Atholl, Singapore
235 bgs, J W Phyfe & Co, Lennox, Singapore
390 bgs, J W Phyfe & Co, Lennox, Singapore
500 bgs, 45,355 lbs, J Kissock & Co, Rotterdam, R'dam
300 bgs, 33,699 lbs, J Kissock & Co, Rotterdam, Rotterdam
SHELLS—50 bgs, R Crooks & Co, Mesaba, London
WHITE—135 bgs, J W Phyfe & Co, Lennox, Singapore
PIMENTO—117 bgs, 13,230 lbs, American Trading Co, Santiago, Tuxpan
48 bgs, 6,300 lbs, Gillespie Bros & Co, Erica, Kingston
500 bgs, 70,950 lbs, J E Kerr & Co, Axminster, Kingston
50 bgs, 7,000 lbs, A S Lascelles & Co, Flandria, Kingston
1,299 bgs, 201,198 lbs, C Wessels & Bro, Flandria, Kingston
599 bgs, 90,023 lbs, C Wessels & Bro, Flandria, Kingston
157 bgs, 25,008 lbs, C Wessels & Bro, Flandria, Kingstock
60 bgs, 8,559 lbs, Macy & Dunham, Flandria, Kingston
POMADE—2 cs, E H Burr, La Savoie, Havre
2 cs, Dodge & Olcott, Lahn, Genoa
POTASH, CARB—95 cks, 51,462 lbs, A Klipstein & Co, Finland, Antwerp
CYANIDE—1,025 cs, Roessler & H Chem Co, Hanover, Hamburg
MURI—500 bgs, 112,530 lbs, H J Baker & Bro, Cassel, Bremen
1,000 bgs, 224,000 lbs, Battelle & Renwick, Cassell, Bremen
750 bgs, 159,874 lbs, P Weidinger & Son, Moltke, Hamburg
1,500 bgs, 335,280 lbs, P Weidinger & Son, Patricia, Hamburg
425 tons, H H Salmon & Co, Bremen, Bremen
100 tons, H H Salmon & Co, Aug Victoria, Hamburg
1,200 tons, H H Salmon & Co, Breslau, Bremen
SULPHATE—250 bgs, 55,880 lbs, P Weidinger & Son, Patricia, Hamburg
SULPHITE—8 cs, 708 lbs, Rogers & Pyatt Co, Patricia, Hamburg
600 bgs, 20 cks, 169,987 lbs, Wing & Evans, Bovic, Loverpool
SALT—27 cks, 24,288 lbs, S Jordan & Co, Finland, Antwerp
SILICATE—73 cks, 56,285 lbs, Colgate & Co, Celtic, Liverpool
SULPH—40 cks, C Georgi, Rotterdam, Rotterdam
SPONGE—16 bls, Lasker & Bernstein, Morro Castle, Havana
TALC—400 bgs, 88,000 lbs, L A Saloman & Bro, Lahn, Bremen
200 bgs, 44,000 lbs, Petit Chemical Co, Lahn, Bremen
500 bgs, 112,000 lbs, Hammill & Gillespie, Beeswing, Bordeaux
1,700 bgs, 480,800 lbs, L A Saloman & Bro, Beeswing, Bordeaux
TALLOW—113 cks, 44,262 lbs, Wilcox Lard Ref & Smlt Co, Celtic, Liverpool
TAPIOCA FLOUR—933 bgs, 139,650 lbs, L Littlejohn & Co, Atholl, Singapore
TEA SWEEPINGS—212 bgs, Hensel B & L, Rotterdam, Rotterdam
TERRA ALBA—50 cks, 57,344 lbs, F A Reichard, Burgundia, Marseilles
ULTRAMARINE—8 cks, 4,475 lbs, C F Zentgraf, Rotterdam, Rotterdam
VANILLA BEANS—11 cs, 1,311 lbs, Dodge & Olcott, Philadelphia, Southampton
4 cs, 545 lbs, R F Downing & Co, La Savoie, Havre
9 cs, 877 lbs, G Lueders & Co, Philadelphia, Hamburg
VERMILION—5 cks, 2,770 lbs, Binney & Smith, Celtic, Liverpool
2 cks, 1,500 lbs, F W Devoe & C T Raynolds Co, Mesaba, London
WAX—73 bgs, A D Hitch, Celtic, Liverpool
BEES'—2 hhds, 1,415 lbs, A D Strauss, Curityba, Cardenas
JAPAN—150 cs, 31,521 lbs, C von Pustau & Co, Asama, Shanghai
30 cs, 6,000 lbs, J Kissock & Co, Asama, Shanghai
PARAFFINE—25 cs, 5,500 lbs, Fuerst Bros & Co, Canadian, Liverpool
225 cs, 44,800 lbs, Smith & Nichols, Celtic, Liverpool
500 cs, 129,584 lbs, C L Richards, Laurentian, Glasgow
15 cs, 3,360 lbs, Fuerst Bros & Co, Anchovia, Glasgow
ZINC, CHLO—68 cks, 55,692 lbs, Chemical Imp & Mfg Co, Canadian, Liverpool
OXIDE—25 cks, 11,200 lbs, Toch Bros, Canadian, Liverpool
SULPH—5 cks, 1,102 lbs, R W Phair & Co, Rotterdam, Rotterdam
WHITE—50 cks, 22,046 lbs, Gabriel & Schall, Rotterdam, Rotterdam

Warehoused.

ACID ACETIC—4 dms, 3,706 lbs, G Lueders & Co, Cassel, Bremen

Cream of Tartar Tartaric Acid
GUARANTEED 99—100 Per Cent. Pure.
TARTAR CHEMICAL COMPANY, 47 Cedar St., N. Y.

835 bbls, 327,292 lbs, Guiterman, Rosenfeld & Co, Taberistan, Busserah
2,152 bbls, 359,000 lbs, Guiterman, Rosenfeld & Co, Taberistan, Busserah
LIQUID, EGGS—210 cs, 28,648 lbs, Am Express Co, Hanover, Hamburg
LOGWOOD—400,000 lbs, A Behrens & Co, Adirondack, Cape Hayti
180,000 lbs, H Struller, Adirondack, Cape Hayti
224,000 lbs, W & A Leaman, Adirondack, Cape Hayti
MACE—10 cs, 1,330 lbs, J Kissock & Co, Rotterdam, Rotterdam
MAGNESIA, CARB—55 cs, 6,160 lbs, McKesson & Robbins, Saxonia, Liverpool
CALCINED—7 cs, 350 lbs, McKesson & Robbins, Saxonia, Liverpool
MAGNESIUM, CHLO—75 bbls, 4,438 lbs, Schoellkopf, H & H Co, Hanover, Hamburg
MALLOW FLOWERS—1 bl, Lehn & Fink, Kensington, Antwerp
MANGANESE, OXIDE—23 cks, Roessler & H Chem Co, Hanover, Hamburg
MANNA—10 cs, Lehn & Fink, Smyra, Palermo
MANURE SALT—324,782 lbs, Heller, Hirsh & Co, Cassel, Bremen
111,760 lbs, P Weidinger & Son, Patricia, Hamburg
50 tons, H H Salmon & Co, Pisa, Hamburg
MARJORAM—9 bls, 2,224 lbs, D R James & Bro, Celtic, Liverpool
MEDICAL HERBS—8 bls, Peek & Velsor, Celtic, Liverpool
PREP—4 cs, 262 lbs, Stallman & Fulton Co, Kaiser Wilhelm der Grosse, Bremen
12 cs, Farbof, Elberfeld Co, Finland, Antwerp
SEED—100 bgs, 22,000 lbs, Stallman & Fulton Co, Mesaba, London
MICA—25 cs, 4,009 lbs, Sills-Eddy Mica Co, Minnehaha, London
40 cs, 4,198 lbs, Mica Mfg Co, Minnehaha, London
86 cs, 8,455 lbs, E Munsell & Co, Barenfels, Calcutta
48 cs, 6,695 lbs, E Munsell & Co, Saxonia, Liverpool
NUTMEGS—150 cs, 9,975 lbs, L Littlejohn & Co, Atholl, Singapore
100 cs, 6,650 lbs, J Kissock & Co, Asama, Singapore
55 cs, J Kissock & Co, Rotterdam, Rotterdam
3 cks, F A Reichard, Burgundia, Marseilles
OLIVE—25 bbls, Lehn & Fink, Hesperia, Leghorn
OLIVE FOOTS—50 bbls, 2,870 gals, Peters, White & Co, Celtic, Liverpool
100 bbls, 5,830 gals, Oil Seeds Pressing Co, Pontiac, Bari
100 bbls, 4,857 gals, Oil Seeds Pressing Co, Lombardia, Leghorn
300 bbls, 15,501 gals, C B Richards & Co, Burgundia, Leghorn
100 bbls, 5,000 gals, Peters, White & Co, Celtic, Liferpool
PALM—74 cks, 112,000 lbs, Colgate & Co, Celtic, Liverpool
57 cks, 46,800 lbs, T M Marc & Co, Milano, Hamburg
37 cks, 44,759 lbs, Colgate & Co, Hanover, Hamburg
PEPPERMINT—5 cs, 300 lbs, Stallman & Fulton, Philadelphia, Southampton
PETITGRAIN—2 cs, 216 lbs, A A Stilwell, Philadelphia, London
POPPYSEED—8 cks, 431 gals, G A & E Meyer, La Gascogne, Havre
RAPE SEED—50 bbls, 2,622 gals, Schoellkopf, H & H Co., Br Princess, Antwerp
200 bbls, 10,046 gals, Standard Oil Co, Saxonia, Liverpool
SESAME—10 cs, 4,441 lbs, C W Jacobs & Allison, Celtic, Liverpool
TAR—50 cks, R F Downing & Co, Finland, Antwerp
WHALE—2 cks, 102 gals, Colgate & Co, Celtic, Liverpool
WOOD—10 bbls, 501 gals, Dodge & Olcott, Saxonia, Liverpool
YLANG YLANG—2 cs, 40 lbs, J B Horner, La Gascogne, Havre
OLEO, STEARINE—129 bgs, 21,590 lbs, Wilcox Lard Ref Co, Celtic, L'pool
126 bgs, 22,050 lbs, Wilcox Lard Ref Co, La Gascogne, Havre
OPIUM—9 cs, 976 lbs, McKesson & Robbins, Philadelphia, Southampton
ORANGE, MINERAL—63 cks, 43,373 lbs, J M Huber, Finland, Antwerp
25 cks, 28,942 lbs, F A Reichard, La Gascogne, Havre
OZOKERITE—600 bgs, 68,376 lbs, Am Trading Co, Nicomedia, Stettin
QUININE—6 cs, 6,000 ozs, Stallman, Fulton Co, Philadelphia, Southampton
52 cs, 25,000 ozs, Schieffelin & Co, Cassel, Bremen
74 cs, 74,000 ozs, E Levi, Rotterdam, R'dam
RED LEAD—20 cks, 38,578 lbs, Wing & Evans, Celtic, Liverpool
RHUBARB—8 cs, R Hilliers' Son Co, Lennox, Shanghai
SAGE—2 bls, Lehn & Fink, Blucher, H'b'g
SALT CAKE—12 cks, A de Ronde & Co, Majestic, Liverpool
SARSAPARILLA—25 bls, 5,700 lbs, Harburger & Stack, Santiago, Tampico
SAVORY LEAVES—6 bls, 1,109 lbs, D R James & Bro, Celtic, Liverpool
SENNA—30 bls, 8,072 lbs, Stallman & Fulton Co, Labuan, Suez
25 bbls, 11,690 lbs, G W Sheldon & Co, Labuan, Suez
SHELLAC—100 chts, O S Janney & Co, Labuan, Calcutta
298 bgs, Berry Bros, Labuan, Calcutta
52 bgs, Hoople & Androvitte, Labuan, Calcutta
97 bgs, Hoople & Androvitte, Labuan, Calcutta
119 bgs, Hoople & Androvitte, Labuan, Calcutta
25 bgs, Hoople & Androvitte, Labuan, Calcutta
100 cs, G A Alden & Co, Philadelphia, London
303 cs, Rogers & Pyatt, Philadelphia, London
83 chts, 13,388 lbs, Smith & Schipper, Philadelphia, London
100 cs, Rogers & Pyatt, St Paul, London
SOAP, CASTILE—450 cs, 16,956 lbs, J D Nordlinger, Mesaba, London
SODA ASH—20 cks, 31,022 lbs, Churchman & Co, Majestic, Liverpool
BORIC—25 cks, 28,607 lbs, J Marsching & Co, Lombardia, Genoa
ANILINE COLORS—34 cks, Farb of Elberfeld Co, Rotterdam, Rotterdam
60 cks, Farb of Elberfeld Co, Finland, Antwerp
BRONZE POWDER—15 cs, 4,940 lbs, G Benda, Moltke, Hamburg
COCOA BUTTER—122 bls, 27,137 lbs, J Jeldell & Son, Rotterdam, Rotterdam
CORKS—60 bls, 7,782 lbs, L Mundet & Son, Burgundia, Marseilles
DEXTRINE—200 bgs, 43,430 lbs, C Morningstar & Co, Xenia, Stettin
GLUE—75 bls, 16,535 lbs, A Holthusen, Hanover, Hamburg
LAMP BLACK—42 cks, J Wilkes, Br Princess, Antwerp
LICORICE PASTE—50 cs, 14,317 lbs, Arguimbau & Ramee, Tauric, Liverpool
MICA—29 cs, 3,759 lbs, Sills-Eddy Mica Co, Minnetonka, London
OIL, LINALOE—7 cs, 511 lbs, Graham, Hinkley & Co, Esperanza, Vera Cruz
OPIUM—10 cs, 1,523 lbs, G Gulbenkian & Co, Saxonia, Liverpool
42 cs, 6,993 lbs, McKesson & Robbins, Saxonia, Liverpool
POTATO FLOUR—200 bgs, 43,585 lbs, C Morningstar & Co, Xenia, Stettin
SOAP, CASTILE—22 cs, 4,852 lbs, A Klipstein & Co, Lombardia, Genoa
SPONGE—72 bls, Lasker & Bernstein, Mexico, Havana
33 bls, A Isaacs & Co, Yucatan, Nassau

Withdrawals from Bond.
WEEK ENDING NOV. 7.

Aniline colors, cks	37
Bay rum, bbls	1
Bristles, cs	82

TINNOL- A Paste that Sticks
NO Rust Spots on Tin. NO Peeling Off. NO Discoloring of Labels.
WRITE FOR SAMPLE AND PRICES TO
The Arabol Manufacturing Co., 155 William Street, NEW YORK.
Headquarters for SIZING, PASTES, GUMS and MUCILAGES for all purposes.

POTASH
CYANIDE
PRUSSIATE
CARBONATE
CAUSTIC and
All Heavy and Fine Chemicals
Soda Ash
Soda Prussiate
Sal Soda
Caustic Soda
Etc.
ACID
Acetic
Phosphoric
Carbolic
Etc.
Extracts
Gums
PRECIP. CHALK
IMPORTERS—Commission Merchants—EXPORTERS.
FUERST BROS. & CO.
2 Stone St., NEW YORK, & 17 Bridge St.
Bleaching Powders
MINERALS
Fluorspar
Fullers Earth
China Clay
Barytes, Fen.
OILS
CASTOR
OLIVE
RAPE
COCOANUT
ESSENTIAL.
CORRESPONDENCE SOLICITED.

Bristles, cks	8
Bronze powder, cs	20
Chemical salt, cks	54
Chemical salt, cks	6
China clay, cks	300
Canary seed, bgs	100
Cocoa butter, bls	20
Cocoa butter, bgs	25
Corks, bls	53
Dextrine, bgs	400
Glass plate, cs	14
Gum chicle, bgs	30
Logwood ext, cks	36
Mica, cs	114
Oil, ess'l, dms	2
Oil, Codliver, bbls	10
Opium, cs	6
Potato flour, bgs	200
Soap, Castile, cs	21
Soda, caustic, dms	10
Sponge, bls	33

Boston Imports.

ACID, CRUDE TAR—150 cks, Norwegian, Liverpool
ALIZARINE—68 pkgs, Beach & Co, Anglian, London
3 cks, J A & W Bird & Co, Devonian, Liverpool
7 cks, United Indigo & Chemical Co, Devonian, Liverpool
AMMONIA—14 cks, Georgios I, Stettin
ANILINE COLOR—4 cks, 1 keg, Michigan, Liverpool
SALT—23 cks, J A & W Bird & Co, Devonian, Liverpool
BLEACH—172 cks, Ultonia, Liverpool
269 pkgs, J L & D S Riker, Michigan, Liverpool
BRISTLES—20 cs, Anglian, London
10 cs, Davis, Turner & Co, Anglian, London
CALCIUM CHLORIDE—10 drs, Hollis Cold Storage Co, Michigan, Liverpool
CAMPHOR—8 pkgs, Michigan, Liverpool
CHINA CLAY—120 cks, Perkins, Goodwin & Co, Michigan, Liverpool
100 cks, Michigan, Liverpool
220 cks, Morey & Co, Commonwealth, Liverpool
200 cks, Baring Bros & Co, Commonwealth, Liverpool
50 cks, Commonwealth, Liverpool
784 cks, Baring Bros & Co, Devonian, Liverpool
30 cks, Devonian, Liverpool
200 cks, The Champion Card Co, Devonian, Liverpool
CLAY—14 cs, W N Proctor & Co, Cambroman, Genoa
COLOR—3 pkgs, W N Proctor & Co, Anglian, London
DEXTRINE—100 bgs, Georgios I, Stettin
DYEWOOD EXT—2 bbls, J A & W Bird & Co, Devonian, Liverpool
5 cks, 25 bbls, Devonian, Liverpool
GLASS, PLATE—3 cs, Commonwealth, Liverpool
GLUE—24 pkgs, Michigan, Liverpool
10 cks, Carpenter-Morton Co, Commonwealth, Liverpool
GREASE—100 bbls, Geo H Leonard & Co, Devonian, Liverpool
12 bbls, 6 hxs, L M Crane & Co, Devonian, Liverpool
6 bxs, J B Moors & Co, Devonian, Liverpool
GYPSUM SALTS—9 cks, John Bouler, Ultonia, Liverpool
INDIGO—12 pkgs, Baring Bros & Co, Anglian, London
4 pkgs, Anglian, London
MEDICINAL PREP'S—6 cs, Gustav Martin, Norwegian, Liverpool
MICA—6 pkgs, Pitt & Scott, Anglian, London
OIL—200 bbls, Baring Bros & Co, Commonwealth, Liverpool
75 bbls, J B Moors & Co, Devonian, Liverpool
OLIVE—8 cks, Jos Losero, Cambroman, Genoa
100 cks, A Olivino, Cambroman, Genoa
PALM—98 cks, Ultonia, Liverpool
RECOVERED—100 bbls, Michigan, Liverpool
100 bbls, Commonwealth, Liverpool
50 bbls, J B Moors & Co, Devonian, Liverpool
ORCHILL, LIQ—2 cks, W N Proctor & Co, Anglian, London
OXIDE—1 ck, H Harbour, Ultonia, Liverpool
PAINT—4 cs, J A & W Bird & Co, Michigan, Liverpool
PEPPER—150 bgs, D & L Slade Co, Anglian, London
15 bgs, Anglian, London
50 pkgs, Cambroman, Genoa
PERSIAN BERRY EXT—15 cks, W N Proctor & Co, Commonwealth, Liverpool
PITCH—802 cks, Michigan, Liverpool
QUEBRACHO EXT—100 bbls, C A Spencer, Cambroman, Genoa
RED LEAD—1 ck, Chadwick-Boston Lead Co, Ultonia, Liverpool
SHELLAC—50 cs, Anglian, London
SIZE, VEGETABLE—24 cks, R B Potter, Anglian, London
SOAP—20 cks, Michigan, Liverpool
2 cs, Devonian, Liverpool
22 cs, Cambroman, Genoa
SODA, ARSENIATE—5 cks, Dom Cot Mills Co, Devonian, Liverpool
ASH—67 cks, Michigan, Liverpool
20 cks, Linder & Meyer, Devonian, Liverpool
52 cks, 800 bgs, 315,951 lbs, Wing & Evans, Devonian, Liverpool
SULPHUR—1,668 bgs, Devonian, Liverpool
SUMAC EXT—30 cks, Devonian, Liverpool
5 cks, Healey, Seaver & Co, Devonian, Liverpool
SUGAR OF LEAD—24 cks, Norwegian, Liverpool
TAPIOCA FLOUR—290 bgs, Michigan, Liverpool
480 bgs, Devonian, Liverpool
TALC—537 tcs, Georgios I, St Petersburg
VARNISH—3 cs, H K Melbourne & Co, Anglian, London
13 cs, Carpenter-Morton Co, Devonian, Liverpool

Philadelphia Imports.

ACID, OXALIC—12 cks, C Bischoff & Co, Acilia, Hamburg
12 cks, A Klipstein & Co, Arcadia, Hamburg
AMMONIA, CARB—15 cks, Brown Bros, Rhynland, Liverpool
ANILINE COLOR—123 cks, Berlin Aniline Works, Assyria, Hamburg
14 cks, Berlin Aniline Works, Acilia, Hamburg
2 cs, 44 cks, Berlin Aniline Works, Arcadia, Hamburg
BARIUM—100 cks, Chas Lennig & Co, Assyria, Hamburg
BARYTES—300 bgs, Gabriel & Schall, Assyria, Hamburg
42 cks, Arcadia, Hamburg
BLEACH—125 drs, O S Janney & Co, Arcadia, Hamburg
BONE DUST—1,129 bgs, Rhynland, Liverpool
BUTTON LAC—15 cs, Mackinaw, London
CHALK—500 tons, Camden Mfg Co, Mackinaw, London
22 cks, Mackinaw, London
CHEMICALS—638 cks, A Klipstein & Co, Assyria, Hamburg
47 cks, A Klipstein & Co, Assyria, Hamburg
30 cks, Arcadia, Hamburg
CHINA CLAY—229 cks, Perkins & Goodwin, Rhynland, Liverpool
100 cks, J W Hampton, Rhynland, Liverpool
COAL TAR PREP—4 cks, Berlin Aniline Works, Acilia, Hamburg
COLOR—4 cks, H E & D G Yarnall, Rhynland, Liverpool
CREOSOTE—1,514 bgs, Manchester Market, Manchester
DEXTRINE—50 bgs, Assyria, Hamburg
GINGER—67 bgs, Mackinaw, London
INDIAN RED—40 cks, 20 kgs, John Lucas & Co, Rhynland, Liverpool
INSECT POWDER—100 bbls, Shoemaker & Voute, Aquileja, Trieste
IRON OXIDE—30 cks, John Lucas & Co, Rhynland, Liverpool
KAINIT—500 tons, Acilia, Hamburg
KEISERIT—100 tons, Acilia, Hamburg
MAGNESITE—5,299 bgs, Fayette Mfg Co, Aquileja, Trieste
MANGANESE—5 cks, Louis H Meyer, Arcadia, Hamburg
NUX VOMICA—190 bgs, Mackinaw, London
OIL, COD LIVER—20 bbls, Smith K & F Co, Asyyria, Hamburg
OLIVE—110 bbls, Mackinaw, London
3 cks, Boericke & Tafel, Arcadia, Hamburg
PALM—8 cks, Rhynland, Liverpool
PALM KERNEL—578 bbls, Assyria, Hamburg
294 bbls, Arcadia, Hamburg
OPIUM—14 cs, Rhynland, Liverpool
PARAFFINE LIQ—3 cks, Lucent Oil Works, Arcadia, Hamburg
POTASH—27 cks, Assyria, Hamburg
MURIATE—3,000 bgs, Assyria, Hamburg
1,000 bgs, Acilia, Hamburg
250 tons, H H Salmon & Co, Assyria, Hamburg
500 tons, H H Salmon & Co, Arcadia, Hamburg
SULPHATE—2,500 bgs, Assyria, Hamburg
100 tons, H H Salmon & Co, Assyria, Hamburg
PUMICE STONE, RAW—65 cs, R J Waddell & Co, Arcadia, Hamburg
SALT CAKE—63 cks, United Alkali Co, Rhynland, Liverpool
SOAP—60 cs, Conway, Smyrna
2 cs, Rhynland, Liverpool
SODA ASH—200 bgs, 56,000 lbs, Wing & Evans, Rhynland, Liverpool
CHLORATE—50 kegs, Kuttroff, P & Co, Acilia, Hamburg
NITRATE—10,100 bgs, Ariel, Caleta Buena
TAR—100 bbls, Brown Bros, Rhynland, Liverpool
VENETIAN RED—200 bbls, John Lucas & Co, Rhynland, Liverpool
WAX—12 bags, Rhynland, Liverpool
ZINC DUST—10 cks, Acilia, Hamburg

Baltimore Imports.

AMMONIA—1,510 bgs, Parthenia, Glasgow
MURIATE—35 bbls, Templemore, Liverpool
BARYTES—50 cks, Willehad, Bremen
CHINA CLAY—920 cks, Templemore, Liverpool
CORKS—49 bbls, Templemore, Liverpool
CORKWOOD—320 bls, Willehad, Bremen
GLASS WINDOW—2,600 cs, English King, Antwerp
GREASE—200 bbls, Willehad, Bremen
MANGANESE—410 tons, Templemore, Liverpool
OIL, PALM—18 cks, Templemore, Liverpool
PHOSPHATE—1,500 bgs, English King, Antwerp
POTASH, MURIATE—3,000 bgs, Willehad, Bremen
500 bgs, English King, Antwerp
SODA ASH—120 bgs, 33,600 lbs, Wing & Evans, Rowanmore, Liverpool
NITRATE—49,795 bgs, Apolo, Pisagua

Newport News Imports.

ACID, BORACIC—23 cks, Alleghany, London
FULLER'S EARTH—1,000 bgs, Hammill & Gillespie, Alleghany, London
GLYCERINE—40 cks, Alleghany, London
OIL, COCOANUT—37 cks, Colby & Co, Alleghany, London
OLEINE—48 pipes, Isaac Winkler & Bro, Alleghany, London
SENNA—158 bls, Chattanooga Medicine Co, Alleghany, London

Charleston Imports.

KAINIT—2,900 tons, H H Salmon & Co, Aureola, Antwerp
3,000 tons, H H Salmon & Co, Margherita, Hamburg
POTASH, MURIATE—800 tons, H H Salmon & Co, Margherita, Hamburg
SULP—50 tons, H H Salmon & Co, Margherita, Hamburg

New Orleans Imports.

CANARY SEED—100 bgs, Louisiana, Antwerp
GLASS, WINDOW—1,026 bxs, Louisiana, Ant
GUM, CHICLE—32 bls, Anselm, Porto Cortez
SODA ASH—38 cks, 67,133 lbs, Wing & Evans, Mechanician, Liverpool
CAUSTIC—80 drs, Louisiana, Antwerp
STEARINE, OLEO—406 bgs, Orniton, Antwerp

San Francisco Imports.

ACID, OXALIC CRYS—20 cks, Balfour, G & Co, Hellensburgh, Antwerp
ARCHIL—638 bls, Meyer, Wilson & Co, Curacao, Magdalena Bay
DAMIANA—20 bgs, C Tetjen & Co, Curacao, La Paz
89 bgs, H Levi & Co, Curacao, La Paz
11 bgs, J Gutte & Co, Curacao, La Paz
17 bgs, G F Olrich, Curacao, La Paz
10 bgs, J D Spreckles, Curacao, La Paz
11 bls, J D Bauman, Curacao, La Paz
32 bgs, L F Lastrets, Curacao, La Paz
44 bls, Thannhauser & Co, Curacao, La Paz
28 bgs, W Loaiza & Co, Curacao, La Paz
FERTILIZER—5,500 bgs, Balfour, G & Co, Hellensburgh, Antwerp
GUM, KAURI—4 cs, Jones & Co, Sonoma, Auckland
2 cs, Sonoma, Auckland
OIL, EUC—6 cs, Parmelee, Morgan & Co, Sonoma, Sydney
MEAL—100 bgs, Colon, Mazatlan
375 bgs, H Levi & Co, Colon, Mazatlan
SPERM—1,452 bbls, Wm Lewis, California, Okhotsk Sea
1,050 bbls, Gayhead, Okhotsk Sea
1,400 bbls, J W R Wing, Chas W Morgan, Okhotsk Sea
1,540 bbls, J W R Wing, Alice Knowles, Fox Island
WHALE—200 bbls, J W R Wing, Chas W Morgan, Okhotsk Sea
OPIUM—716 tins, Korea, Hong Kong
POTASH—100 drs, Balfour, G & Co, Hellensburgh, Antwerp
WAX—2 bgs, C D Bunker & Co, Curacao, Ensenada

Montreal Imports.

ACID, LACTIC—13 cks, Skuld, Rotterdam
ALUM—12 cks, Corinthian, Liverpool
ALUMINA—128 cks, Skuld, Rotterdam
BORAX—41 bbls, Corinthian, Liverpool
BRIMSTONE—2,500 bgs, 284 cks, Bellona, Med Ports
CAMPHOR—1 bx, Skuld, Rotterdam
CHEMICALS—10 cs, Skuld, Rotterdam
CHINA CLAY—160 cks, Corinthian, Liverpool
COLOR—4 cs, Pomeranian, London
DEXTRINE—25 bgs, Rosarian, Glasgow
GLUE—30 bls, 1 cs, Skuld, Rotterdam
GLYCERINE—5 drs, 65 cs, Corinthian, L'pool
INDIGO—42 cks, Skuld, Rotterdam
LITHARGE—3 cks, Skuld, Rotterdam
OIL, CASTOR—160 cks, 15 pkgs, Corinthian, Liverpool
70 bbls, Pomeranian, London
POTASH, CHLORATE—43 pkgs, Pomeranian, London
QUININE—5 cs, Skuld, Rotterdam
RED LEAD—98 cks, Skuld, Rotterdam
40 kegs, Corinthian, Liverpool
SODA—1,337 pkgs, Corinthian, Liverpool
3 cks, Pomeranian, London
ASH—1,652 bgs, Corinthian, Liverpool
CRYSTALS—350 bgs, 155 pkgs, Corinthian, Liverpool
SUMAC—700 bgs, Bellona, Med Ports
WHITE LEAD—365 cks, Skuld, Rotterdam
ZINC, OXIDE—50 cks, Skuld, Rotterdam

EXPORTS FROM NEW YORK.

Week ending Nov. 6.

ACID—300 cbys, $1,000, Uller, St Kitts
3 cbys, $14, City of Washington, Colon
BORACIC—1 keg, $13, Parran, Barbadoes
MURIATIC—5 cbys, $18, Santiago, Tampico
SALICYLIC—50 cks, $2,330, Moltke, Hamburg
STEARIC—3 bgs, 600 lbs, $64, Alene, Port Limon
SULPHURIC—1 dr, $4, Esperanza, Vera Cruz
2 cbys, $10, Fontabelle, Barbadoes
2 cbys, $3, Fontabelle, St Croix
1 dr, $57, Cienfuegos, Cuba
30 drs, $300, Santiago, Tampico
TARTARIC—25 kegs, $575, Celtic, Liverpool
AMMONIA—4 cyls, 2 cbys, $171, New York, San Domingo
ANHY—1 cyl, $51 ,City of Washington, Colon
AQUA—1 dr, $48, Parran, Barbadoes
SAL—1 bbl, $5, New York, San Domingo
SULP—20 bgs, 4,000 lbs, $135, Fontabelle, Barbadoes
ARCHIL EXT—5 bbls, 2,580 lbs, $220, La Savoie, Havre
BALSAM—1 cs, $72, La Gascogne, Havre
TOLU—1 cs, 99 lbs,$36, Tauric, Liverpool
BARK—167 bgs, 10 bls, 17,840 lbs, $1,735 Hanover, Hamburg
CASCARILLA—7 bls, $90, Lindisfarne, Havre
BRIMSTONE—1 bbl, $9, Esperanza, Havana
1 bbl, $8, Cienfuegos, Cuba
CALCIUM CARBIDE—120 drs, 18 cans, 16,620 lbs, $480, Sainte Marie, Hamilton
10 drs, 1,120 lbs, $50, Howick Hall, Algoa Bay
36 drs, 3,960 lbs, $133, Pathfinder, Porto Rico
15 drs, 1,710 lbs, $57, Capri, Pernambuco
304 cs, 30,260 lbs, $804, Cienfuegos, Cuba
CANDLES—65 cs, $146, Rosalind, St Johns
8 cs, $29, City of Washington, Colon
14 crts, 10 cs, $184, New York, San Domingo
5 cs, $58, Fontabelle, Demerara
54 cs, $67, Fontabelle, Barbadoes
2 cs, $18, Fontabelle, St Croix
10 cs, $15, Chas. L. Mitchell, Paramaribo
2 cs, $5, Alene, Kingston
1 crt, $13, Adirondack, Hayti
23 cs, $65, Erica, Kingston
61 cs, 2 crts, $95, Parran, Barbadoes
20 cs, $45, Parran, St Thomas
CARBON—150 bbls, 50 cs, $2,000, Hanover, Hamburg
160 bbls, $1,275, Lindisfarne, Havre
50 bbls, $375, Br. Princess, Antwerp
CASSIA—10 bls, $67, Uller, Demerara
15 cs, $90, Fontabelle, Demerara
1 cs, $5, Fontabelle, St Croix
1 bg, $14, Alene, Cartagena
CINNAMON—5 bls, 510 lbs, $93, Atlas, Progreso
12 pkgs, 1,105 lbs, $228, Santiago, Tampico
CORIANDER SEED—5 bgs, 481 lbs, $11, Fontabelle, Demerara
COTTONSEED MEAL—10 bgs, 1,000 lbs, $15, Buckman, Port Antonio
CUMMIN SEED—5 bgs, 1,139 lbs, $80, Fontabelle, Demerara
DEER TONGUE—25 bls, 13,537 lbs, $26, Hanover, Hamburg
DYEWOOD EXTRACT—2 bbls, 1,158 lbs, $74, Hanover, Hamburg
1 bbl, 4 kegs, 3 cs, 1,180 lbs, $143, Moltke, Hamburg
170 bxs, 10,200 lbs, $579, Finland, Antwerp
DYESTUFF—1 bbl, 568 lbs, $34, Hanover, Hamburg
EGG YOLK—10 bbls, 5,257 lbs, $280, Lindisfarne, Havre
FERTILIZER—100 bbls, 1,500 bgs, $2,644, Virginia, Las Palmas
FLAXSEED—24,000 bush, $33,600, Tauric, Liverpool
41,860 bush, $62,500, Br Princess, Antwerp
23,993 bush, $33,600, Bristol City, Bristol
41,882 bush, $62,700, Ryndam, Amsterdam
50,297 bush, $74,500, Moltke, Hamburg
52,842 bush, $68,700, Finland, Antwerp
16,988, bush, $25,550, Canadian, Liverpool
87,933 bush, $119,000, Lindisfarne, Dunkirk
GAMBIER—110 bls, 21,830 lbs, $1,500, Moltke, Hamburg
GLUCOSE—250 bbls, $3,000, Laurentian, Glasgow
490 bbls, $7,860, Bristol City, Bristol
50 bbls, $798, Celtic, Liverpool
480 bbls, $5,037, Mesaba, London
100 bbls, $1,200, Canadian, Liverpool
GLUE—37 bbls, 12,500 lbs, $3,700, La Savoie, Havre
1 bbl, 120 lbs, $11, New York, San Domingo
4 bbls, 1,363 lbs, Esperanza, Havana
2 bbls, $50, Esperanza, Vera Cruz
1 keg, $6, Cienfuegos, Cuba
2 cs, $15, Celtic, Liverpool
1 bbl, 100 lbs, $17, Alene, Cartagena
24 cs, 682 lbs, $90, Messaba, London
GRAPE SUGAR—1,866 bags, 208,922 lbs, $2,700, Bristol City, Bristol
250 bags, 28,000 lbs, $750, Bellarden, Manchester
1,998 bags, 223,776 lbs, $4,476, Mesaba, London
1,000 bags, 112,000 lbs, $2,500, Canadian, Liverpool
GRAPHITE—5 bbls, $141, Lindisfarne, Havre
1 bbl, $20, Br Princess, Antwerp
GREASE SOAP—60 tcs, $1,838, Bonnie Doon, St John, N B
LUB.—30 cs, $216, Philadelphia, Southampton
534 cs, $979, Howick Hall, Algoa Bay
8 bbls, 5 cs, 3 kgs, $82, New York, San Domingo
25 bbls, 95 kegs, $290, Esperanza, Havana
1 bbl, $30, Esperanza, Vera Cruz
3 bbls, 125 pkgs, $165, Cienfuegos, Cuba
20 cs, $65, Celtic, Liverpool
4 pkgs, $6, Alene, Kingston
10 bbls, $110, Mesaba, London
2 bbls, $16, Finland, Antwerp
2 bbls, 40 kegs, 1 cs, $336, Canadian, Liverpool
8 cs, $11, Erica, Kingston
24 cs, $208, Egyptian Prince, Buenos Ayres
18 bbls, $284 Br Princess, Antwerp
1,000 bbls, $17,700, Burgundia, Marseilles
3 kegs, $16, Parran, St Thomas
MINERAL—250 bbls, $1,500, Celtic, Liverpool
GUM TRAGACANTH—8 cs, $1,483, St Paul, Southampton
KAINIT—10 bags, 2,000 lbs, Esperanza, Havana
KALSOMINE—25 cs, $142, Howick Hall, East London
LAMP BLACK—1 bbl, 1 cs, $20, New York, San Domingo
7 cs, $31, Pathfinder, Porto Rico
2 pkgs, $17, Cienfuegos, Cuba
LEAD—8,480 pigs, 784,159 lbs, $17,500, Tauric, Liverpool
3,634 pigs, 336,100 lbs, $7,500, Laurentian, Glasgow
3,629 pigs, 336,133 lbs, $7,500, Pontiac, Trieste
1,186 pigs, 112,025 lbs, $2,800, Canadian, Liverpool.
LIME, ACETATE—639 bags, 92,874 lbs, $1,700, Leon XIII., Barcelona
1,516 bags, 201,739 lbs, $3,200, Celtic, Liverpool
2,044 bags, 301,777 lbs, $5,300, Motlke, Hamburg
3,115 bags, 411,560 lbs, $7,200, Br Princess, Antwerp
MICA—111 bags, $250, La Gascogne, Havre
MILK SUGAR—20 cs, 3,300 lbs, $262, Moltke, Hamburg
10 cs, 2,200 lbs, $178, Pontiac, Trieste
OIL, ALMOND—1 bbl, $29, Cienfuegos, Cuba
BERGAMOT—2 cs, 250 lbs, $448, Moltke, Hamburg
CAKE—156 bags, 56,635 lbs, $600, Oscar II., Copenhagen
638 bags, 166,746 lbs, $1,800, Oscar II. Gothenburg
512 bags, 112,000 lbs, $1,400, La Savoie Havre
675 bags, 74,250 lbs, $800, Exeter City, Bristol
3,344 bags, 1,053,985 lbs, $11,772, Ryndam, Rotterdam.
3,280 bags, 1,336,436 lbs, $17,035, Finland Antwerp
1,400 bags, 346,762 lbs, $8,424, La Gascogne, Havre
717 bags, 224,357 lbs, $3,000, Lindisfarne Havre
870 bags, 282,445 lbs, $3,712, Br Princess Antwerp
CASTOR—2 cs, $17, City of Washington, Colon
5 bbls, $164, Cienfuegos, Cuba
CENTRIFUGAL—8 bbls, $241, New York, San Domingo
COCOANUT—2 bbls, $87, Fontabelle, Demerara
10 hhds, $500, Parran, Barbadoes
CORN—250 bls, $3,800, Oscar II., Gothenburg
507 bbls, $11,340, Hanover, Hamburg
120 bbls, $3,000, Hanover, Gothenburg
60 bbls, $1,700, Hanover, Malmoe

Zimmer's Chinin. Lygosinat
" Lygosin (Natrium Lygosinatum)
Pankreon Validol, Eunatrol.
Kryofine, Vioform, Triferrin
C. BISCHOFF & CO., 88 Park Place. New York.

COTTONSEED—50 bbls, $974, Lombardia, Genoa
75 bbls, $1,670, Uller, St Kitts
750 bbls, $14,543, Oscar II, Copenhagen
38 cs, $207, City of Washington, Colon
301 bbls, $6,988, La Savoie, Havre
17 bbls 306 cs, $1,894, New York, San Domingo
1 bbl, $20, New York, Turks Island
2 bbls, $47, Esperanza, Vera Cruz
80 bbls, $1,845, Fontabelle, Demerara
36 bbls, 55 cs, $1,038, Fontabelle, Barbadoes
40 bbls, $849, Fontabelle, Martinique
100 bbls, $2,140, Francis S. Hampshire, Rio Janeiro
10 bbls, $240, Hanover, Hamburg
250 bbls, $4,321, Capri, Santos
4 bbls, 35 cs, $247, Alene, Kingston
33 cs, $176, Alene, Port Limon
5 cs, $30, Alene, Cartagena
325 bbls, $6,676, Ryndam, Rotterdam
400 bbls, $8,965, Lahn, Genoa
500 bbls, $9,750, Moltke, Hamburg
350 bbls, $7,518, Pontiac, Algiers
925 bbls, $18,834, Pontiac, Venice
300 bbls, $6,720, Pontiac, Trieste
540 bbls, $12,130, Pontiac, Malta
110 bbls, $2,278, Canadian, Liverpool
900 bbls, $21,076, La Gascogne, Havre
9 bbls, 75 cs, $525, Erica, Kingston
35 bbls, $678, Parran, Barbadoes
9 bbls, $190, Parran, St Thomas
50 bbls, 43 cs, $1,268, Parran, Guadeloupe
CYLINDER—50 gls, $20, City of Washington, Colon
300 gls, $197, New York, San Domingo
ESS'L—1 cs, $111, Esperanza, Vera Cruz
25 cs, $7,500, Mesaba, London
40 cs, $3,402, Moltke, Hamburg
EUC—1 cs, $14, Parran, Barbadoes
LARD—1,295 gls, $1,095, Uller, Demerara
5,098 gls, $4,384, Oscar II, Helsingborg
1,250 gls, $775, Oscar II, Copenhagen
600 gls, $526, Howick Hall, East London
50 gls, $46, New York, San Domingo
20 gls, $18, New York, Turks Island
50 gls, $41, Fontabelle, Demerara
10 gls, $9, Fontabelle, Barbadoes
10 gls, $9, Fontabelle, St Croix
600 gls, $550, Mesaba, London
1,250 gls, $971, Moltke, Hamburg
20 gls, $16, Parran, Barbadoes
LINSEED—250 gls, $120, Rosalind, St Johns
20 gls, $9, New York, San Domingo
100 gls, $65, Cumbal, Payta
20 gls, $15, Alene, Savanilla
10 gls, $8, Adirondack, Hayti
150 gls, $72, Santiago, Tampico
LINSEED CAKE—2,807 bgs, 607,988 lbs, $8,000, Ryndam, Rotterdam
2,822 bgs, 1,008,000 lbs, $13,500, Br Princess, Antwerp
LUB—500 gls, $51, Tauric, Liverpool
58,500 gls, $11,600, Lombardia, Genoa
3,000 gls, $600, Lombardia, Naples
15,000 gls, $3,000, Lombardia, Bombay
100 gls, $30, Uller, Demerara
6,750 gls, $950, Oscar II, Copenhagen
1,250 gls, $150, Oscar II, Koenigsberg
4,250 gls, $510, Oscar II, Stockholm
300 gls, $100, City of Washington, Colon
150 gls, $22, Atlas, Progreso
7,500 gls, $1,200, Laurentian, Glasgow
37,500 gls, $4,740, Bristol City, Bristol
31,350 gls, $3,925, La Savoie, Havre
3,600 gls, $1,080, Howick Hall, East London
3,800 gls, $1,082, New York, San Domingo
50 gls, $27, New York, Turks Island
700 gls, $267, Esperanza, Havana
1,550 gls, $122, Esperanza, Vera Cruz
600 gls, $200, Pathfinder, Porto Rico
200 gls, $51, Fontabelle, St Croix
150 gls, $20, Fontabelle, Demerara
4,850 gls, $1,275, Cumbal, Guayaquil
1,650 gls, $1,010, Cumbal, Salaverry
9,250 gls, $1,850, Cumbal, Callao
10,000 gls, $2,453, Capri, Santos
4,200 gls, $1,068, Cienfuegos, Cuba
1,530 gls $254, Celtic, Liverpool
100 gls, $23, Alene, Kingston
300 gls, $120, Alene, Savanilla
100 gls, $90, Ryndam, Amsterdam
500 gls, $146, Ryndam, Rotterdam
116,020 gls, $16,850, Mesaba, London
25,000 gls, $5,025, Moltke, Hamburg
800 gls, $148, Pontiac, Palermo
47,200 gls, $6,219, Finland, Antwerp
18,250 gls, $4,910, Etruria, Liverpool
24,050 gls, $3,055, Santiago, Tampico
14,750 gls, $4,207, Canadian, Liverpool
15,450 gls, $1,895, La Gascogne, Havre
1,500 gls, $170, Lindisfarne, Havre
73,050 gls, $14,610, Lindisfarne, Dunkirk
23,450 gls, $3,188, Egyptian Prince, Buenos Ayres
500 gls, $120, Parran, Barbadoes
500 gls, $183, Parran, St Thomas
MEAL—1,000 bags, 125,000 lbs, $1,442, Tauric, Liverpool
560 bags, 70,000 lbs, $968, Uller, St Kitts
50 bbls, 9,158 lbs, $145, Uller, Demerara
55 bags, 6,875 lbs, $97, Fontabelle, Demerara
63 bags, 7,875, lbs, $118, Fontabelle, Barbadoes
92 bags, 11,500 lbs, $162, Fontabelle, St Croix
3 bags, 375 lbs, $6, Erica, Kingston
760 bags, 95,000 lbs, $1,370, Parran, Barbadoes
MIN'L COLZA—5,000 gls, $600, Oscar II, Copenhagen
12,500 gls, $1,500, Bristol City, Bristol
2,000 gls, $240, Celtic, Liverpool
7,500 gls, $900, Canadian, Liverpool
NEATFOOT—515 gls, $474, Lombardia, Genoa
OLEO—50 bbls, 20 tcs, $1,923, Rosalind, St Johns
340 tcs, $11,225, Oscar II, Copenhagen
140 tcs, $6,080, Oscar II, Christiania
70 tcs, $3,300, Oscar II, Gothenburg
70 tcs, $2,150, Oscar II, Malmoe
540 tcs, $29,074, Hanover, Hamburg
1,798 tcs, $62,300, Ryndam, Rotterdam
379 tcs, $16,600, Moltke, Hamburg
70 tcs, $1,276, Etruria, Liverpool
50 tcs, $2,400, Canadian, Liverpool
35 tcs, 50 bbls, $3,257, Br Princess, Antwerp
PALM—1 ck, $85, Esperanza, Vera Cruz
PEP—15 cs, $150, Mesaba, London
PINE—6 bbls, $48, Rosalind, Halifax
SEWING MACH—2 bbls, $32, Philadelphia, Southampton
22 cs, $66, City of Washington, Colon
35 cs, $108, Esperanza, Vera Cruz
2 pkgs, $22, Celtic, Liverpool
1 bbl, 2 cs, $15, Alene, Port Limon
1 cs, $7, Alene, Savanilla
SPERM—1 bbl, $39, New York, San Domingo
1 bbl, $40, New York, Turks Island
2 bbls, $13, Adirondack, Hayti
PAINT—1 bbl, $55, Rosalind, Halifax
15 cs, $180, Rosalind, St Johns
3 cs, 1 bbl, $53, City of Washington, Colon
1 cs, $20, Oscar II, Christiania
85 cs, $1,089, Howick Hall, East London
13 pkgs, $124, New York, San Domingo
4 cs, $30, New York, Turks Island
4 bbls, 100 kegs, 44 cs, $579, Esperanza, Havana
16 bbls, 16 kegs, 5 cs, $998, Esperanza, Vera Cruz
4 bbls, 6 cs, 3 kegs, $282, Pathfinder, Porto Rico
2 bbls, 4 cs, $73, Fontabelle, St Croix
9 cs, $125, Leon XIII, Barcelona
151 bgs, $725, La Champagne, Havre
4 cs, $251, Capri, Pernambuco
11 bbls, 1 cs, $471, Cienfuegos, Cuba
6 cs, $131, Celtic, Liverpool
1 bbl, 13 cs, $130, Alene, Kingston
2 bbls, 1 cs, $61, Alene, Port Limon
10 pkgs, $115, Adirondack, Hayti
20 kegs, 3 cs, $251, Mesaba, London
1 cs, 1 bbl, $62, Moltke, Hamburg
10 bbls, $265, Finland, Antwerp
3 bbls, 15 cs, $78, Santiago, Tampico
15 cs, $180, Egyptian Prince, Buenos Ayres
11 cs, $92, Egyptian Prince, Montevideo
2 cs, $18, Parran, Barbadoes
1 cs, $33, Parran, Guadeloupe
PEPPER—1 bg, $13, Olympia, Curacao
6 bgs, $74, New York, San Domingo
15 bgs, $166 Fontabelle, Demerara
4 bgs, $64, Cienfuegos, Cuba
1 bg, $12, Alene, Kingston
1 bg, $14, Alene, Cartagena
14 bgs, $175, Adirondack, Hayti
PETROLEUM—(See Petroleum Clearances on page 31.)
PETROLEUM JELLY—4 cs, $73, Howick Hall, East London
8 cs, $123, Celtic, Liverpool
3 cs, $81, Alene, Kingston
326 cs, $4,755, Mesaba, London
2 bbls, 14 cs, $193, Br Princess, Antwerp
PIMENTO—458 bgs, 72,308 lbs, $4,335, Pontiac, Trieste
PITCH—155 bbls, $25 Uller, Demerara
1 bbl, $2, New York, Turks Island
10 bbls, $16, Fontabelle, Demeraca
5 bbls, $8, Cienfuegos, Cuba
1 bbl, $2, Alene, Kingston
5 bbls, $10, Alene Port Limon
1 bbl, $2, Adirondack, Hayti
PLUMBAGO—30 cs, $97, Philadelphia, Southampton
POTASH—1 bbl, 1 ck, $51, Esperanza, Havana
SULP—4 cs, $225, City of Washington, Colon
ROOTS—46 bls, 10,037 lbs, $1,278, Hanover, Hamburg
ROSIN—100 bbls, $390, City of Washington, Colon
1 bbl, $4, New York, San Domingo
16 bbls, $52, Esperanza, Havana
1 bbl, $4, Esperanza, Vera Cruz
500 bbls, $2,159, Francis S. Hampshire, Rio Janeiro
50 bbls, $194, L. G. Crosby, Maceio
4 bbls, $14, Cienfuegos, Cuba
81 bbls, $463, Adirondack, Hayti
5 bbls, $21, Santiago, Tampico
1,100 bbls, $4,806, Egyptian Prince, Buenos Ayres
125 bbls, $640, Br Princess, Antwerp
1 bbl, $5, Parran, Barbadoes
91 bbls, $495, Bonnie Doon, St John, N B
SARSAPARILLA—24 bls, 23,414 lbs, $1,225, Hanover, Hamburg
SHELLAC—1 pkg, $25, Esperanza, Havana
SIZING—24 bbls, 7,387 lbs, $600, Lombardia, Genoa
83 bbls, 6 cs, 26,268 lbs, $1,673, Ryndam, Rotterdam
SOAP—2 cs, $18, Olympia, Curacao
1 cs, $27, Rosalind, St Johns
77 cs, $463, Majestic, Liverpool
344 cs, $552, City of Washington, Colon
73 cs, $698, Howick Hall, Algoa Bay
1,004 cs, 5 bbls, $1,667, New York, San Domingo
15 cs, $39, New York, Turks Island
104 cs, $264, Esperanza, Havana
1 cs, $10, Esperanza, Vera Cruz
393 cs, $1,223, Pathfinder, Porto Rico
1,116, cs, $2,239, Fontabelle, Demerara
59 cs $98, Fontabelle, Barbadoes
171 cs, $250, Fontabelle, St Croix
4 cs, $210, Allianca, Colon
200 cs, $360, Chas. L. Mitchell, Paramaribo
6 cs, $267, Cumbal, Valparaiso
13 cs, $788, Cumbal, Mollendo
50 cs, $325, Exeter City, Bristol
1 cs, $110, Capri, Pernambuco
61 cs, $67, Cienfuegos, Cuba
42 cs, $3,188, Celtic, Liverpool
17 cs, $141, Alene, Kingston
40 cs, $136, Alene, Port Limon
110 cs, $186, Alene, Savanilla
1 cs, $138, Ryndam, Rotterdam
705 cs, $1,685, Adirondack, Hayti
677 cs, $3,301, Mesaba, London
4 cs, $25, Moltke, Hamburg
2 cs, $14, Finland, Antwerp
1 cs, $8, Santiago, Tampico
1 cs, $7, Erica, Kingston
200 cs, $700, Lindisfarne, Havre
30 pkgs, 1 cs, $3,170, Egyptian Prince, Buenos Ayres
1 cs, $10, Br Princess, Antwerp
80 cs, $238, Parran, Barbadoes
$1 cs, $8, Parran, St Thomas
SODA, ASH—3 drs, 5,307 lbs, $74, Adirondack, Hayti
BICARB—20 kegs, 2,240 lbs, $24, Howick Hall, Algoa Bay
1 keg, 112 lbs, $2, New York, San Domingo
1 keg, 112 lbs, $2, Esperanza, Vera Cruz
2 cs, 224 lbs, $5, Fontabelle, St Croix
5 bbls, 20 kegs, 4,240 lbs, $50, Alene, Kingston
30 kegs, 3,360 lbs, $39, Erica, Kingston
100 bbls, 40,000 lbs, $360, Egyptian Prince, Buenos Ayres
1 keg, 112 lbs, $3, Parran, Barbadoes
CAUSTIC—7 drs, 5,076 lbs, $146, New York, San Domingo
3 drs, 2,250 lbs, $14, Cienfuegos, Cuba
4 drs, 3,000 lbs, $90, Alene, Port Limon
25 drs, 17,875 lbs, $588, Adirondack, Hayti
NITRATE—8 bgs, 2,000 lbs, $46, Esperanza, Havana
SAL—1 bbl, 375 lbs, $3, Fontabelle, St Croix
1 bbl, 375 lbs, $5, Cienfuegos, Cuba
5 bbls, 1,875 lbs, $15, Alene, Kingston
1 bbl, 350 lbs, $3, Alene, Port Limon
SPERMACETI—150 cs, 9,482 lbs, $2,035, Moltke, Hamburg
30 cs, 1,271 lbs, $313, Pontiac, Trieste
SPONGE—50 bls, $500, Lombardia, Genoa
333 bls, $15,000, La Savoie, Havre
4 bls, 61 cs, $706, Esperanza, Vera Cruz
31 bls, $500, Ryndam, Rotterdam
35 bls, $1,200, Mesaba, London
77 bls, $1,775, Pontiac, Trieste
STARCH—5 cs, $24, City of Washington, Colon
100 cs, $225, Howick Hall, East London
5 bbls, 7 cs, $49, New York, San Domingo
4 bbls, 3 cs, $53, New York, Turks Island
1 cs, $12, Esperanza, Vera Cruz
10 cs, 1 bbl, $31, Fontabelle, St Croix
10 cs, $18, Chas L Mitchell, Surinam
2,400 bxs, 80 crts, $7,087, Hanover, Hamburg
2 bxs, $3, Cienfuegos, Cuba
6 cs, $11, Alene, Kingston
35 cs, $52, Alene, Port Limon
10 cs, $18, Erica, Kingston
11 cs, $25, Parran, Barbadoes
STEARINE—25 tcs, 2,901 lbs, $375, Oscar II, Copenhagen
COTTONSEED—200 bbls, 76,996 lbs, $5,000, Ryndam, Rotterdam
TALLOW—2 tcs, 898 lbs, $70, Uller, Demerara
140 tcs, 61,865 lbs, $2,450, Oscar II, Malmoe
7 bbls, 2,829 lbs, $198, New York, San Domingo
3 tcs, 1,086 lbs, $82, Fontabelle, Demerara
3 tcs, 1,090 lbs, $83, Chas L Mitchell, Paramaribo
120 bbls, 45,789 lbs, $2,948, Adirondack, Hayti
2 tcs, 768 bls, $18, Mesaba, London
600 bbls, 211,783 lbs, $12,500, Burgundia, Marseilles
TAR—50 bbls, $250, Uller, Demerara
2 bbls, $10, City of Washington, Colon
1 bbl, $7, New York, San Domingo
5 bbls, $26, Esperanza, Havana
20 bbls, $95, Esperanza, Vera Cruz
5 bbls, $25, Pathfinder, Porto Rico
10 bbls, $55, Chas L Mitchell, Surinam
18 bbls, $89, Alene, Port Limon
1 bbl, $3, Adirondack, Hayti
2 bbls, $10, Santiago, Tampico
100 bbls, $495, Canadian, Liverpool
20 bbls $45, Bonnie Doon, St John, N B
COAL—1 bbl, $5, New York, Turks Island
1 bbl, $5, New York, San Domingo
25 bbls, $107, Esperanza, Vera Cruz
1 bbl, $5, Fontabelle, St Croix
1 bbl, $5, Cienfuegos, Cuba
TRIPOLI—149 bgs, 29,800 lbs, $315, Hanover, Hamburg
TURPENTINE—3 cs, $20, City of Washington, Colon
70 cs, $508, Howick Hall, Algoa Bay
5 cs, $30, New York, San Domingo
37 cs, $184, Esperanza, Havana
10 cs, $62, Cumbal, Valparaiso
1 cs, $7, Fontabelle, St Croix
2 cs, $10, Fontabelle, Demerara
500 cs, $2,970, Francis S Hampshire, Rio Janeiro
2 bbls, 10 cs, $88, Cienfuegos, Cuba
25 cs, $147, Capri, Pernambuco
6 bbls, $172, Alene, Kingston
50 cs, 1 bbl, $351, Alene, Port Limon
1 cs, $7, Alene, Savanilla
2 bbls, $47, Erica, Kingston
29 cs, $179, Parran, Barbadoes
VANILLA BEANS—10 cs, $700, Moltke, H'burg
VARNISH—130 gls, $130, City of Washn, Colon
1,444 gls, $1,350, Bristol City, Bristol
100 gls, $110, Howick Hall, East London
195 gls, $149, Esperanza, Havana
220 gls, $293, Esperanza, Vera Cruz
100 gls, $116, Leon XIII, Barcelona
60 gls, $45, Cienfuegos, Cuba
160 gls, $93, Alene, Kingston
10 gls, $6, Alene, Port Limon
34 gls, $25, Alene, Savanilla
121 gls, $371, Moltke, Hamburg
173 gls, $238, Finland, Antwerp
2,094 gls, $1,260, Lindisfarne, Havre
WAX, BEES'—78 bgs, 8,114 lbs, $2,210, Moltke, Hamburg
PAR—25 bbls, 8,622 lbs, $430, Oscar II, Stockholm
20 bgs, 4,040 lbs, $375, Atlas, Progreso
342 bbls, 134,486 lbs, $6,725, Bristol City, Bristol
100 cs, 25,370 lbs, $1,200, La Savoie, Havre
480 cs, 2 bbls, 127,857 lbs, $6,816, Howick Hall, East London
25 bbls, 7,249 lbs, $254, Esperanza, Vera Cruz
50 bgs, 10,000 lbs, $975, Vigilancia, Havana
20 cs, 5,075 lbs, $240, Capri, Santos
638 bbls, 200 cs, 235,750 lbs, $11,795, Celtic, Liverpool
87 bgs, 17,400 lbs, $1,107, Alene, Port Limon
1,203 cs, 317,551 lbs, $14,435, Mesaba, L'don
425 bbls, 605 bgs, 50 cs, 290,110 lbs, $14,955, Moltke, Hamburg
85 bbls, 29,964 lbs, $1,500, Finland, Antw'p
310 bbls, 70 cs, 117,591 lbs, 6,340, Canadian, Liverpool
VEGETABLE—122 bgs, 22,780 lbs, $2,415, Hanover, Hamburg
WHALEBONE—91 bdls, 5,527 lbs, $23,500, La Savoie, Havre
WHITE LEAD—1 bbl, $19, New York, San Domingo
6 bbls, $12, Esperanza, Havana
2 cs, $13, Alene, Kingston
WHITING—5 bbls, $10, Pathfinder, Porto Rico
1 bbl, $3, Alene, Port Limon
WOOD FILLER—13 cs, $113, Ryndam, R'dam
2 cs, $47, Mesaba, London
ZINC, ASHES—106 bbls, 44,017 lbs, $414, Bristol City, Swansea
DROSS—117 slabs, 10,068 lbs, $324, Tauric, Liverpool
287 slabs, 30 pcs, 22,287 lbs, $724, Hanover, Hamburg
199 slabs, 25,620 lbs, $700, Moltke, H'burg
2 bbls, 1,680 pcs, 140,624 lbs, $4,655, Canadian, Liverpool
OXIDE—300 bbls, 73,500 lbs, $3,000, Tauric, Liverpool
100 bbls, 22,400 lbs, $1,000, Bristol City, Bristol
300 bbls, $73,500 lbs, $3,000, Mesaba, L'don

Boston Exports.

GLASS, WINDOW—1 bx, $18, Admiral Dewey, Port Antonio, Jamaica
GLUCOSE—1 bbl, $18, Prince Arthur, Yarmouth, N S
GLUE—59 pkgs, $1,300, Chicago, London
GREASE—325 bbls, 1 pkg, $5,226, Armenian, Liverpool
OIL—1 bbl, Geo W Frye, Halifax, Halifax
CAKE—1,244 sks, $5,962, Armenian, Liverpool
155 sks, $205, Prince Arthur, Yarmouth, N S
COD—50 cks, E H Downing & Co, Halifax, Halifax
LINSEED—5 bbls, $248, Bona Fides, St Pierre
LUB—6 bbls, $35, Bona Fides, St Pierre
MEAL—40 bgs, $54, Scintilla, Bridgewater, N S
PAINT—19 cs, $275, Armenian, Liverpool
EARTH—34 kgs, $146, Assyria, Hamburg
SOAP—20 cs, $2,700, Saxonia, Liverpool
SODA ASH—35 cks, $200, Exeter City, Bristol, England
5 bbls, $35, Chicago, London
STARCH—15 bbls, $300, Chicago, London
1 bbl, $24, Saxonia, Liverpool

Philadelphia Exports.

ALCOHOL, WOOD—68 drs, Crown Point, London
CARBON—300 pkgs, Hanover, Hamburg
CHEMICAL SALTS—4 cs, Athesia, Hamburg
DYEWOOD EXT—35 bbls, Switzerland, Antwerp
250 bxs, Athesia, Hamburg
200 bbls, reported in our issue of Sept 29 Ex S S Assyria to Hamburg, should have been 20 bbls
250 bbls, reported in our issue of Oct 13 Ex S S Arcadia to Hamburg, should have been 250 bxs
GLUE—8 bbls, Genesee, Copenhagen
GREASE—77 bbls, Belgenland, Liverpool
15 bbls, 3 kegs, Crown Point, London
MINERAL—175 bbls, Belgenland, Liverpool
PET—80 bbls, Belgenland, Liverpool
LAMP BLACK—300 bbls, Crown Point, London
LINSEED CAKE—800 bgs, Belgenland, Liverpool
1,600 bgs, Crown Point, London
673 bgs, Switzerland, Antwerp
OIL CAKE—335 bgs, Belgenland, Liverpool
1,446 bgs, Switzerland, Antwerp
CAKE, CORN—1,150 bgs, Hanover, Hamburg
LUB—760 bbls, Belgenland, Liverpool
7,140 bbls, Siberian, Glasgow
1,439 bbls, Crown Point, London
2,167 bbls, Switzerland, Antwerp
1,560 bbls, Hanover, Hamburg
7,720 bbls, Athesia, Hamburg
MIN'L COLZA—150 bbls, Belgenland, Liverpool
340 bbls, Switzerland, Antwerp
MIN'L SPERM—135 bbls, Switzerland, Antwerp
OLEO—65 tcs, Belgenland, Liverpool
50 tcs, Siberian, St Johns
1,019 tcs, Athesia, Hamburg
PAINT—46 cs, Siberian, St Johns
ROSIN—500 bbls, Athesia, Hamburg
SOAP—2 bbls, Belgenland, Liverpool
1,500 bxs Crown Point, London
STEARINE—650 tcs, Switzerland, Antwerp
TANKAGE—1,000 bgs, Crown Point, London
WAX, PAR—305 bbls, 300 cs, Belgenland, Liverpool
315 bbls, 200 cs, Siberian, Glasgow
275 bbls, 400 cs, Crown Point, London
2,291 bgs, Athesia, Hamburg

Baltimore Imports.

BARK—287 bgs, Cassel, Bremen
2,360 bgs, Fitzclarence, Havre
EXTRACT—50 bbls, Orthia, Glasgow
3 bbls, 383 bxs, Alexandria, Hamburg
20 bbls, Cassel, Bremen
300 bxs, Fitzclarence, Newcastle
CARBON—50 cs, Orthia, Glasgow
81 bbls, Fitzclarence, Havre
DEER TONGUE—4 bls, Alexandria, Hamburg
GRAPHITE—35 bbls, Fitzclarence, Havre
OIL CAKE—1,102 bgs, Lord Downshire, Belfast
1,451 bgs, Lord Downshire, Dublin
655 bgs, Manhanset, Leith
COTTONSEED—100 bbls, Orthia, Glasgow
100 bbls, Alexandria, Hamburg

J. L. & D. S. RIKER
46 CEDAR STREET, NEW YORK
IMPORTERS AND MANUFACTURERS' AGENTS
SOLE AGENTS FOR THE UNITED STATES & CANADA
OF THE UNITED ALKALI CO., Limited OF GREAT BRITAIN
FOR THE SALE OF THEIR VARIOUS BRANDS OF
Bleaching Powder

LUB—188 bbls, Vedamore, Liverpool
300 bbls, Alexandria, Hamburg
120 bbls, Cassel, Bremen
100 bbls, Fitzclarence, Havre
OLEO—310 tcs, Alexandria, Hamburg
PIMENTO—1,492 bgs, Alexandria, Hamburg
ROSIN—1,197 bbls, Vedamore, Liverpool
200 bbls, Cassel, Bremen
300 bbls, Lord Downshire, Belfast
TALLOW—70 tcs, Alexandria, Hamburg
WAX, PAR—120 bbls, Orthia, Glasgow

Savannah Exports.

COTTONSEED—4,461 bgs, $6,660, Palatina, Liverpool
ROSIN—1,250 bbls, $3,850, Jas Farie, Jr, Colin Archer, Hull
TURPENTINE—2,446 bbls, $66,042, Colin Archer, Hull

New Orleans Exports.

COTTONSEED, CAKE—3,367 bgs, Hoerde, Hamburg
958 bgs, Carrigan Head, Belfast
9,325 bgs, Texas, Copenhagen
2,976 bgs, Bardsey, Copenhagen
1,207 bgs, Birkhall, Havre
MEAL—22,981 bgs, Hoerde, Hamburg
2,171 bgs, Carrigan Head, Belfast
1,092 bgs, Brinkburn, Manchester
4,480 bgs, Jamaican, Liverpool
6,720 bgs, Antillian, London
1,122 bgs, Politician, Liverpool
7,229 bgs, Explorer, Liverpool
2,236 bgs, Birkhall, Havre
OIL—2 bbls, Nicaragua, Bluefields
6 bbls, Breakwater, Porto Cortez
COTTONSEED—2,248 bbls, Lacroma, Marseilles
2,200 bbls, Lacroma, Trieste
200 bbls, Maristow, Antwerp
50 bbls, Chalmette, Havana
2,500 bbls, Algeria, Marseilles
PETROLEUM—410 cs, Breakwater, Porto Cortez
PHOSPHATE—2,250 tons, Lacroma, Trieste
3,000 tons, Nordhvalen, Bremen
ROSIN—10 bbls, Lacroma, Trieste
900 bbls, Brinkburn, Manchester
300 bbls, Algeria, Genoa
SOAP—50 bxs, Nicaragua, Bluefields
42 bxs, Breakwater, Porto Cortez
273 bbls, Brinkburn, Manchester
137 bbls, Explorer, Liverpool
TRIPOLI—485 bgs, 65 bbls, Explorer, Liverpool
TURPENTINE—1 bbl, Nicaragua, Bluefields
100 bbls, Brinkburn, Manchester

Galveston Exports.

COTTONSEED, CAKE—2,757 bgs, $8,048, Selma, Havre
2,785 bgs, $7,360, Trident, Hamburg
1,164 bgs, $3,127, Barbadian, Liverpool
MEAL—18,845 bgs, $26,132, Thurlang Castle, Antwerp
29,608 bgs, $50,008, Magdala, Bremen
4,915 bgs, $5,775, Selma, Havre
77,735 bgs, $98,325, Trident, Hamburg
4,239 bgs, $7,676, Cerea, Hamburg
11,467 bgs, $16,767, Farnham, Bremen
5,593 bgs, $6,322, Barbadian, Liverpool

San Francisco Exports.

ACID—1 dr, Barracouta, Mexico
2 cs, Alameda, Honolulu
17 cbys, R P Rithet, Honolulu
ALUM—1 bbl, Alameda, Honolulu
AMMONIA—3 cyls, Alameda, Honolulu
BRIMSTONE—10 bgs, Alameda, Honolulu
CANDLES—11 bxs, Barracouta, Ecuador
166 bxs, Alameda, Honolulu
COPPER SULPHATE—6,000 lbs, Barracouta, Mexico
DYESTUFF—3 pkgs, Alameda, Honolulu
GINSENG—3,467 lbs. America Maru, Hong Kong
GLUCOSE—1,340 lbs, Alameda, Honolulu
GREASE—2 cs, Mariposa, Tahiti
GUM—2 cs. Alameda, Honolulu
2 cs, Queen, Br Columbia
1 cs, America Maru, Shanghai
OIL CAKE—2,601 bgs, R P Rithet, Honolulu
PAINT—30 cs. Barracouta, Mexico
2 cs, 51 pkgs, Barracouta, Guatemala
31 pkgs, Alameda, Honolulu
10 pkgs, R P Rithet, Honolulu
16 pkgs, Queen, Br Columbia
4 pkgs, America Maru, Shanghai
24 pkgs, Mariposa, Tahiti
PITCH—10 bbls, Alameda, Honolulu
3 bbls, Maraiposa, Tahiti
POTASH—1 keg, Alameda, Honolulu
QUICKSILVER—1 flk, Alameda, Honolulu
RED LEAD—2 kegs, Barracouta, Mexico
20 kegs, Alameda, Honolulu
ROSIN—9,915 lbs, Barracouta, Mexico
3,735 lbs, Barracouta, Guatemala
SALTPETRE—4 kegs, Alameda, Honolulu
SHEEP DIP—7 cs, Alameda, Honolulu
SHELLAC—1 bbl, Alameda, Honolulu
SOAP—1 bx, Barracouta, Guatemala
25 bxs, Barracouta, Ecuador
154 bxs, Alameda, Honolulu
101 bxs, R P Rithet, Honolulu
22 bxs, America Maru, Japan
108 bxs, Mariposa, Tahiti
SODA—1,017 lbs, Barracouta, Mexico
1,498 lbs, Alameda, Honolulu
CAUSTIC—50 drs, Barracouta, Mexico
1 dr, Alameda, Honolulu
STARCH—273 lbs, Barracouta, Colombia
5,490 lbs, Alameda, Honolulu
TALLOW—13,338 lbs, Barracouta, Guatemala
TAR—5 bbls, Barracouta, Guatemala
2 bbls, Barracouta, Nicaragua
25 bbls, Alameda, Honolulu
7 bbls, Mariposa, Tahiti
TURPENTINE—2 cs, 1 tank, Barracouta, Guatemala
2 cs, Mariposa, Tahiti
VARNISH—1 pkg, Barracouta, Guatemala
8 cs, R P Rithet, Honolulu
7 cs, Mariposa, Tahiti
WAX—13,720 lbs, Queen, Br Columbia
1 pkg, Alameda, Honolulu
WHITE LEAD—110 kegs, Barracouta, Guatemala

CHARTERS.

Following is a list of vessels chartered at principal ports during the past week to convey products to or from American ports:—

KAINIT—Br str Celtic Princess, from Hamburg to Charleston or Savannah, p t
Ger str Lindenfels, from Hamburg to N Y or Norfolk, p t
LOGWOOD—Nor str Dagny, from Hayti to N Y or Philadelphia, p t
PHOSPHATE—Sch Margaret Ward, from Fort Tampa to Baltimore, p t
Br str Jas Turpie, from Tampa to U K or Continent, p t
PUMICE—Sch Lizzie Carr, hence to Norfolk, p t

NEW YORK DOMESTIC RECEIPTS.

Week ending Nov. 6.

ALCOHOL—42 bbls, order, New Orleans
240 bbls, J A Webb & Son, H R R R
107 bbls, J A Webb & Son, D, L & W R R
6 bbls, Engel, H & Co, D, L & W R R
WOOD—5 bbls, order, F R L
85 bbls, 30 hf bbls, W S Gray, L V R R
101 bbls, W S Gray, F R L
16 bbls, Gwynne & R, D, L & W R R
BARK—63 bgs, order, Balto Trans Co
300 bgs, order, O D S S L
EXTRACT—50 bbls, export, O D S S L
BARYTES—536 bbls, order, O D S S L
BEESWAX—1 bx, order, O D S S L
4 bbls, order, Savannah
3 bbls, 1 pge, order, P R R
CLAY—335 bags, Owl Comm'l Co, Jacksonville
276 cks, Inter Paper Co, Charleston
126 cks, R McNamee & Co, Charleston
1 car, 18 cks, order, O D S S L
604 bags, order, Savannah
DEER TONGUE—37 bls, order, Savannah
EPSOM SALTS—100 bbls, McKessen & R, Balto Trans Co
100 bbls, Stanley, J & Co, Balto Trans Co
FLAXSEED—42 cars, order, H R R R
158 cars, order, W S R R
1 car, order, E R R
1 car, order, D, L & W R R
120 bbls, T R Bagot, H R R R
33,400 bush, H B Hebert & Co, Canal
32 cars, order, L V R R
FULLER'S EARTH—432 bgs, Standard Oil Co, Jacksonville
GREASE—70 bbls, Northrop Com Co, P R R
12 tcs, 75 bbls, order, O D S S L
85 bbls, 140 pgs, order, C R R of N J
30 bbls, order, F R L
150 tcs, W D Vandenhove & Co, H R R R
80 bbls, E Valk & Co, L V R R
75 tcs, Elbert & G, D L & W R R
HIGHWINES—80 bbls, Fleischman & Co, H R R R
640 bbls, Amer Dist Co, D L & W R R
240 bbls, Steinhardt Bros & Co, P R R
20 bbls, order, New Orleans
155 bbls, J A Webb & Son, D L & W R R
80 bbls, Luyties Bro, D L & W R R
160 bbls, Nat Dist Co, D L & W R R
80 bbls, H Kroeger & Co, P R R
100 bbls, S Krauss & Bro, D L & W R R
80 bbls, Cook & R Co, D L & W R R
240 bbls, Engel, H & Co, D L & W R R
80 bbls, United W & T Co, D L & W R R
80 bbls, Geo Clark, D L & W R R
LEAD—7,251 pigs, Amer S & R Co, Galveston
MICA—81 bbls, 200 bgs, order, O D S S L
MUSTARD SEED—250 bgs, J K Armsby Co, P R R
500 bgs, Materne & Hess, Galveston
OIL, CAKE—7,688 bags, export, D L & W R R
605 bags, export, H R R R
299 bags, export, W S R R
1,135 bags, McLaren & M, H R R R
225 bags, McLaren & M, E R R
470 bags, export, L V R R
COTTONSEED—28 tank cars, W J Wilcox Ld Co W S R R
1,335 bbls, export, H R R R
1,221 bbls, Amer Cott Oil Co, Galveston
300 bbls, Hopkins, D & Co, Galveston
1,506 bbls, order, O D S S L
550 bbls, Amer Cott Oil Co, New Orleans
150 bbls, export, New Orleans
80 bbls, Elbert & G, New Orleans
1,260 bbls, order, Savannah
350 bbls, export, P R R
717 bbls, export, O D S S L
220 bbls, export, B & O R R
FISH—263 bbls, E Gardner, Balto Trans Co
47 bbls, Wells & W, F R L
24 bbls, order, O D S L L
LINSEED—138 bbls, Macy & D, H R R R
123 bbls, A L Clements, D L & W R R
120 bbls, T R Bagot, H R R R
120 bbls, Macy & D, D L & W R R
63 bbls, Pittsburg P G Co, D L & W R R
10 bbls, order, H R R R
LUB—55 bbls, 58 cs, S E Heyman & Co, P R R
195 bbls, order, C R R of N J
100 bbls, N Y Lub Oil Co, B & O R R
120 bbls, export, P R R
MEAL—500 bags, I H Reed & Co, E R R
250 bgs, export, L L & W R R
300 bgs, export, W S R R
NEATSFOOT—70 bbls, export, L V R R
OLEO—485 tcs, export, L V R R
79 tcs, Cudahy Pkg Co, H R R R
689 tcs, export, W S R R
140 tcs, export, E R R
RED—60 bbls, W A Chambers Co, P R R
190 bbls, export, B & O R R
ROSIN—225 bbls, order, Savannah
PETROLEUM, CRUDE—20,000 bbls, Standard Oil Co, Port Arthur
PITCH—150 bbls, order, Savannah
POTASH—10 cks, McKesson & R, Balto Trans Co
6 cks, order, H R R R
10 cks, B P Ducas & Co, Balto Trans Co
2 cks, order, D L & W R R
14 cks, T Pfeiffer, P R R
2 cks, order, P R R
QUICKSILVER—450 flasks, Haas Bros, Galveston
ROSIN—100 bbls, H J Hayne, Jacksonville
100 bbls, Baily & M, Jacksonville
922 bbls, C B Turton Co, Jacksonville
575 bbls, order, Jacksonville
103 bbls, Paterson D Co, Jacksonville
1,540 bbls, M W Larendon, Jacksonville
1,623 bbls, order, Savannah
91 bbls, order, O D S S L
43 bbls, Tolar, H & Co, Jacksonville
550 bbls, Paterson D Co, Charleston
7 bbls, R Halley, Georgetown
247 bbls, Baily & M, Georgetown
105 bbls, L Breslauer, Georgetown
10 bbls, order, Georgetown
1,000 bbls, Paterson D Co, Brunswick
213 bbls, Tolar, H & Co, Brunswick
71 bbls, Baily & M, Brunswick
SPELTER—3,455 slabs, order, O D S S L
SPONGE—4 bls, order, Galveston
3 bls, order, Jacksonville
STEARINE—24 hhds, D C Link, H R R R
465 tcs, export, W S R R
TALLOW—150 tcs, export, H R R R
24 hhds, W D Vandenhove & Co, W S R R
100 tcs, 25 bbls, D C Link, P R R
4 bbls, order, P R R
70 tcs, export, E R R
28 tcs, Welch, H & C Co, E R R
58 pgs, order, C R R of N J
32 bbls, order, O D S S L
125 bbls, E Volk & Co, P R R
6 bbls, order, D, L & W R R
63 bbls, order, F R L
171 bbls, W D Vandenhove & Co, P R R
50 tcs, W D Vandenhove & Co, F R L
TAR—50 bbls, order, O D S S L
110 bbls, S P Shotter Co, Georgetown
25 bbls, C A Woolsey Co, Georgetown
150 bbls, Paterson D Co, Georgetown
319 bbls, order, Georgetown
TURPENTINE—41 bbls, order, O D S S L
700 bbls, order, Jacksonville
1,875 bbls, order, Savannah
17 bbls, Tolar, H & Co, Jacksonville
15 bbls, Baily & M, Georgetown
416 bbls, Tolar, H & Co, Georgetown
52 bbls, L Breslauer, Georgetown
5 bbls, B Moore & Co, Georgetown
5 bbls, H Louderbough, Georgetown
10 bbls, C A Woolsey Co, Georgetown
85 bbls, H J Hayne, Georgetown
44 bbls, F W Blossom, Georgetown
321 bbls, Paterson D Co, Georgetown
36 bbls, Tolar, H & Co, Brunswick
VANILLA BEANS—25 cs, export, Galveston

Total Domestic Receipts.

At New York for week ending Nov. 6, 1902.

	For week.	Since Jan. 1.
Alcohol, bbls	395	9,315
Beeswax, pkgs	9	902
Boneblack, bgs	....	5,935
Borax, bgs	....	3,515
Cottonseed, bgs	....	28,235
Ashes, bgs	....	480
Cake, bgs	....	.....
Hulls, bgs	....	.....
Meal, bgs	....	67,987
Flaxseed, bush	267,640	2,254,550
Grease, pkgs	717	27,715
Highwines, bbls	2,035	102,588
Lead, pigs	7,251	441,407
Mustard seed, bgs	750	21,237
Oil cake, bgs	10,422	541,201
Cottonseed, bbls	11,869	201,118
Fish, bbls	334	2,843
Lard, bbls	....	1,862
Lubricating, bbls	482	19,069
Oleo stock, tcs	1,393	108,465
Pitch, bbls	150	6,104
Quicksilver, flks	450	9,857
Rosin, bbls	7,300	411,184
Soap stock, bbls	....	11,817
Spelter, pigs	3,455	101,345
Sponges, bls	7	10,644
Starch, bgs	....	6,393
Stearine, pkgs	489	11,102
Sumac, bgs	....	7,332
Tallow, pkgs	906	37,370
Tar, bbls	654	28,330
Turpentine, crude	....	200
Spirits, bbls	3,622	114,307

Baltimore Domestic Receipts.

Week ending Nov. 5.

CLAY—400 pkgs, Savannah
OIL, ROSIN—206 bbls, Savannah
PITCH—120 bbls, Savannah
ROSIN—4,450 bbls, Savannah
TURPENTINE—73 bbls, Savannah

Savannah Domestic Receipts.

Week ending Nov. 5.

ROSIN—18,152 bbls
TURPENTINE—3,752 bbls

Wilmington, N. C., Domestic Receipts.

Week ending Nov. 5.

ROSIN—1,453 bbls
TAR—714 bbls
TURPENTINE—384 cks
CRUDE—532 bbls

New Orleans Domestic Receipts.

Week ending Nov. 5.

COTTONSEED—23,035 bgs
OIL—5 bbls
PETROLEUM, CRUDE—12,000 bbls, Sabine Pass
1,266,000 gls, Sabine Pass

San Francisco Domestic Receipts.

Week ending Nov. 1.

OIL—284 pkgs, from New York, via Panama

TOTAL IMPORTS AT NEW YORK.

In the following table we give the total imports (in packages unless otherwise specified), and their values at the port of New York for the week ending Nov. 7, 1902:—

	Quantity.	Value.
Glass, plate	154	$19,515
Window	7,140	11,964
L. G. plates	62	4,861
Ambergris	1	647
Arsenic	251	3,364
Acid, arsenic	338	3,091
Benzoic	50	1,360
Boracic	25	1,012
Carbolic	307	10,347
Oxalic	41	1,525
Salicylic	....	2
All other	28	4,075
Aniline colors	1,738	98,043
Salt	40	1,800
Ammonia, carb	110	1,063
Sulph	241	1,477
Alum	1	101
Argols	2,472	104,263
Albumen	247	4,055
Alizarine	200	14,824
Asphalt	....	1,109
Balsam, all other	4	384
Bark, all other	79	841
Barytes, carb	20	149
Bay leaves	152	940
Bleach powder	291	3,929
Bronze powder	....	6,396
Butter, cocoa	562	16,848
Chalk	....	185
Chem. salts	343	12,035
Chicory	1,213	2,020
Cinchonidia	80	18,774
Civet	1	2,021
Cocoa leaves	145	5,087
Cutch	530	1,886
Dragon's blood	2	102
Dextrine	200	1,195
Divi divi	161	246
Fish sounds	10	576
Flowers, all other	47	1,118
Fuller's earth	650	502
Gambier	1,565	14,513
Gelatine	48	1,309
Glycerine	189	11,499
Gum Arabic	250	6,103
Assafoetida	56	1,066
Aloes	94	665
Benzoic	1	18
Chicle	348	6,482
Copai	1,658	13,480
Guiac	6	80
Kino	3	69
Kowrie	1,175	33,981
Licorice	1	18
Olibanum	20	287
Sandrac	10	364
Shellac	1,195	47,292
Tragacanth	94	5,360
All other	6	76
Glue	448	11,994
Indigo	440	37,144
Auxiliary	11	389
Carmine	1	335
Ext of	10	656
Iodine	230	67,464
Isinglass	2	78
Laurel leaves	45	503
Leeches	21	234
Locust beans	1	5
Manna	10	696
Manganese	83	1,640
Magnesite	304	1,364
Magnesia	62	524
Magnesium	75	220
Man salt	....	12,745
Mica	77	2,567
Nut galls	300	4,924
Orchilla liq	8	603
Oxide zinc	25	494
Oil, almonds	9	321
Caraway	3	281
Cajeput	20	163
Cocoanut	365	22,922
Croton	13	428
Fusel	51	2,655
Geranium	1	142
Haarlem	52	864
Linseed	1	2
Lavender	12	1,468
Lemon	3	399
Neroli	2	256
Orange	4	126
Olive	2,449	13,897
Palm	191	12,266
Poppy	8	277
Rapeseed	250	5,058
Rose	1	154
Rosemary	2	122
Sesame	25	416
Sandalwood	2	490
Thyme	2	463
Whale	2	45
Other ess	75	10,157
All other	484	9,614
Opium	96	25,557
Paints, unspecified	....	5,700
Blanc fixe	5	50
Chrome yellow	6	282
Drop black	71	808
Iron oxide	200	165
Lithophone	126	2,560
Ocher	425	3,352
Orange mineral	88	3,585
Red lead	20	1,404
Venetian red	267	831
Vermillion	7	1,203
White lead	1	20
Potash, chlor	200	1,073
Carb	95	3,361
Cyanide	1,283	43,332
Sulph	508	2,043
Potato starch	204	945
Plumbago	590	8,657
Quinine	87	7,968
Reg antimony	113	4,335
Root, galangal	40	181
Ipecac	3	128
Licorice	3,037	11,462
Rhubarb	8	172
Sarsaparilla	27	368
All other	138	633
Saffron, ext of	2	1,243
Senna	22	499
Soda ash	47	720
Carb	196	426
Chlor	150	1,484
Sal	15	633
Sulphate	40	363
Silicate	73	461
Storax	10	97
Sponges	121	2,111
Stearine	679	11,138
Sugar of milk	4	77
Talc	2,800	2,701
Terra Alba	50	176
Turmeric	352	1,218
Ultramarine	16	796
Vanilla beans	41	8,490
Varnish	1	60
Wool, grease	191	1,565
Other	....	39,050
Bristles	591	55,835
Alcohol	4	80
Dutch metal	27	3,623
Metal leaf	4	865
Cassia	2,771	14,620
Cinnamon	100	1,567
Chillies	253	1,903
Cloves	1,650	18,296
Ginger	181	1,026
Mace	63	2,073
Mustard	265	5,502
Nutmegs	410	9,082
Pepper	6,994	90,612
Pepper shells	50	438
Pimento	4,515	25,145
Corkwood	....	39,826
Fustic	.....	2,462
Logwood	1,832	10,113
Candles	....	1,690
Clay	....	4,642
Carbon	....	1,316
Corks	....	5,118
Sago flour	1,580	2,695
Seed, anise	10	210
Canary	52	287
Caraway	250	1,493
Castor	1	6
Celery	140	1,927
Coriander	272	540
Fennel	1	18
Lycopodium	2	100
Rape	8	46
Other	....	4,971
Soap, castile	472	983
All other	44	4,256
Stock	569	13,881
Tapioca	2,120	5,540
Flour	2,294	6,033
Wax	....	22,398

MERCK & CO.
NEW YORK
AND
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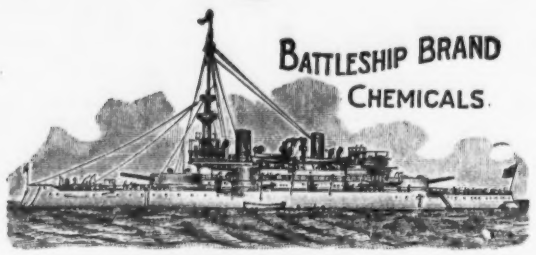
American Bleaching Powder

CAUSTIC



SODA

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CHEMICAL MARKET.

NOTE.—Our prices are for large lots except when otherwise specified, and buyers of small quantities must expect to pay an advance on these figures. Complete prices current will be found on pages 35 and 36.

Saturday Evening, Nov. 8, 1902.

Now that elections are over, trade has settled down to its usual daily routine. There is still a shortage in freight cars and more or less delay in transportation, as the railroads are giving preference to coal shipments. Alkali and cautic soda are both moving freely into channels for consumption. Sal soda is lower, while bicarb soda has been advanced. Bleach is a shade firmer on the spot and for forward. Brimstone is still scarce on the spot and held for full prices. Nitrate of soda is firmer in all positions. Blue vitriol is easier for outside lots of both domestic and foreign. Oxalic acid is steady, both for spot and forward. Arsenic, cream of tartar, acetate of lime and Glauber's salts are all steady and meeting with the usual jobbing demand. The other acids and light chemicals show few changes, as detailed below. Late mail advices from Liverpool say:—

"There is a fair spot business reported in the leading lines of heavy chemicals, but the market cannot be called active. Soda ash continues to move off at usual varying prices as to market. For tierces the nearest range may be called about as follows:—Leblanc ash, 48 per cent, £5 15s.@£6 per ton; 58 per cent., £6 2s. 6d.@£6 7s. 6d. per ton, net cash; ammonia ash, 48 per cent., £4 5s.@ £4 10s. per ton; 58 per cent., £4 10s.@£4 15s. per ton, net cash. Bags, 5s. per ton under price for tierces. Soda crystals in demand at generally £3 7s. 6d. per ton, less 5 per cent. for barrels, or 7s. less for bags, with special terms for certain export quarters. Caustic soda is rather scarce on the spot and firmly held as follows:—Sixty per cent., £8 15s.; 70 per cent., £9 15s.; 74 per cent., £10 5s.; 76 per cent., £10 10s. per ton, net cash. Special quotations for export to the Continent and a few other markets. Bleaching powder in fair request for home consumption, and a moderate trade passing for export. Hardwood packages are nominally quoted at £6 10s.@£6 12s. 6d. per ton, net cash, with special quotations for certain export markets. Chlorate of potash idle and prices nominal at about 2⅝d.@3d. per lb., net cash."

Heavy Chemicals.

ALKALI..—There is still more or less delay in the transportation of goods, also a scarcity of freight cars, as the bulk of them are being used for coal shipments. Further business is reported both for prompt and forward delivery of domestic high test in addition to regular deliveries at 80@85c. f. o. b. works, with sales reported a shade less in bulk, and at 77½c. for bags in the West. In this section the usual consuming demand prevails at 85@90c., as to test, quantity and seller.

BICARB SODA.—Since the large business reported in our last trade has been rather quiet, makers being well sold up for next year. Prices are firmer at 1¼c. for ordinary in kegs and 3c. and upward for extra grades, less the usual discount terms.

CAUSTIC SODA.—Contract deliveries continue good, though more or less delay is experienced in transportation, but this will soon right itself. Further business is reported for spot and forward delivery in addition to regular deliveries of domestic high test at about 1.85@1.90c. f. o. b. works, as to test and seller. No change in this section. The demand continues good and prices remain steady at 1.90@1.95c., as to make, test and seller. More inquiry is reported for powdered, both for prompt and forward, with sales at about 2⅝c. for 60 per cent. and 2⅞c. and upward for higher tests, as to make and quantity.

SAL SODA.—As usual when cold weather sets in domestic makers have reduced prices, which may now be quoted at 60c. f. o. b. works, with 70c. delivered in this section, less the usual discount terms. Concentrated remains steady at 1.40c. and up for "Arm and Hammer," usual terms. Foreign is quiet at 67½c. for arrival.

MONOHYDRATE CRYSTALS.—The bulk of the business is over for the present as far as canal shipments are concerned. There is, however, a good business being done for prompt delivery at 1⅝c., and for "Snowflake" at 1¼c. f. o. b. works, less the usual discount terms.

BLEACHING POWDER.—The market is quiet but steady for spot goods, which are not over plentiful at 1⅝c. for Continental and 1¾c. and upward for Liverpool, as to test, make and seller. The bulk of the business for next year has already been done.

Acids.

ACETIC.—The home demand continues of sufficient volume as to absorb current output, hence no surplus stocks are pressing on the market, which remains steady at 1.80c. and upward, as to test, quantity and style of packing.

MURIATIC.—Considerable business has been done for next year at current prices. Stocks continue light, and prices are well sustained at 1½c. and upward, as to strength and quantity.

OXALIC.—The spot market is rather quiet but steady at 5½@5¾c., as to make and seller. Further business is reported for next year at 5¼@5½c., as to make and quantity.

TARTARIC.—The usual seasonable demand prevails in addition to regular contract deliveries at 28¼@28½c. for crystals and 28¾@29c. for powdered, usual terms of sale.

SULPHURIC.—A fair business is reported for next year at full prices. There is a good spot demand, which prevents any accumulation of stocks, with prices steady for 66 deg. at 1.20c. and upward, as to quantity.

Miscellaneous Chemicals.

ACETATE OF LIME.—No change in the situation, which remains a steady one with rather more inquiry from home consumers in addition to regular contract deliveries. The export demand is also better. Values remain at 1.35@1.40c. for gray and .90@.95c. for brown, as to quantity.

ALUM.—Since the month opened a further increase in contract deliveries is reported to the home trade. Stocks continue light and prices steady at 1.75@1.80c. for lump and 1.80@1.85c. for ground, as to make and quantity.

ARSENIC.—The market remains steady under a good jobbing demand for spot goods at 3@3¼c. for either make. For forward delivery from ⅛ to ¼c. less might be done. Red is selling in a jobbing way at 6⅞@7¼c., as to grade and seller.

BLUE VITRIOL.—Owing to the free arrivals of foreign makes, about 200 tons having come to hand, which was freely offered at 4.55@4.60c. for car lots, domestic makers at once met this competition, though not making any change in their regular trade quotations, which remains at 4.70c. for car lots delivered, usual terms, and for jobbing parcels at 4¾@5¼c., as to the size of the order.

BRIMSTONE.—Very little spot stock is obtainable, for which $24 is named, and from steamers on way at $23.50. Shipments are held at $23@23.25 per ton, as to date of arrival.

CHLORATE OF POTASH.—There is a good jobbing demand for spot goods at 7½@7¾c., as to seller for either. For delivery over next year further sales are reported at 7@7¼c., as to make, quantity and terms of sale.

CHLORAE OF SODA.—Trade has been rather quiet for spot parcels at 7¾@8c., but for next year sales have been made at 7½c. and upward, as to make and quantity.

CARBONATE OF POTASH.—Only a small retail demand is reported outside of regular contract deliveries for prompt and delivery over the balance of the year. Values are fairly steady at 3½@4½c. for hydrated, and 3@3½c. for calcined, as to test, make and quantity.

CREAM OF TARTAR.—Better demand in a jobbing way for spot in addition to regular deliveries of powdered at 22½@22¾c., as to quantity, with makers quoting ½c. up.

COPPERAS.—The usual jobbing demand prevails for spot and forward delivery at 42½c. for bbls. and 37½c. in bulk for car lots.

NITRATE OF SODA.—The market is firmer in all positions, with limited offerings at 1.97½c. for spot or delivery over the balance of the year.

GLAUBER'S SALT.—The bulk of the business passing is confined to regular contract deliveries. Now and then additional car lots are reported at 75c. and the usual advance for jobbing parcels.

SAL AMMONIAC.—The usual jobbing demand prevails for spot and nearby parcels of white grain at 6@6¼c., though second hands are selling a shade less. Lump is steady at 9¼c.

SUGAR OF LEAD.—Since the month opened contract deliveries show a further increase over last month. Values remain steady at 6¼@6½c. for brown and 8¼@8½c. for white crystals, usual terms of sale.

SALTPETER.—No change in the situation, which remains a dull one for crude, which is nominal at 3.40c. for spot and nearby arrivals. Refined is

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Ammoniates, Potashes, Etc.

Trade is still quiet though prices for the leading ammoniates are held firm both for spot and forward delivery. Sulphate of ammonia is steady at $2.95 for shipments and $3.00@$3.05 for spot parcels. Blood is dull at $2.25 f. o. b. Chicago, but to place a round lot this would have to be shaded. Tankage is a shade easier for 9 and 20 at $2.05 and 10 f. o. b. Chicago. Calcutta bone meal as well as domestic steamed is quiet, with very little demand either for spot or forward. Fish scrap dry is scarce, and held at $2.60 and 10, and wet, which is in better stock, at $14.00 per ton f. o. b. factory.

Parties desiring to be brought in contact with concerns who offer bargains in machinery are respectfully referred to page 27 of this issue.

If you desire to be brought in contact with the makers of machinery which enters into the manufacture of chemicals, drugs, paints, dyestuffs, fertilizers, naval stores, varnish, white lead, cotton oil, linseed oil, lubricating oil, etc., we would respectfully refer you to the Machinery Department of this publication, which you will find on page 23. Any special information that may be desired will be gladly furnished upon application, for we are in a position to place prospective purchasers in direct communication with the manufacturers of machinery of all kinds.

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AQUA FORTIS,	SULPHATE SODA,	CHLORIDE ALUMINA,
ACETIC ACID,	BISULPHATE SODA,	WOOL CARBONIZERS,
TIN CRYSTALS,	BISULPHITE SODA,	NITRATE IRON,
MURIATES OF TIN,	HYPOSULPHITE SODA,	NITRATE COPPER,
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DYE MARKET.

NOTE.—Our prices are for large lots except when otherwise specified, and buyers of small quantities must expect to pay an advance on these figures. Complete prices current will be found on page 36.

Saturday Evening, Nov. 8, 1902.

Business has been generally fair in the dyestuffs trade this week and the market as a whole has held pretty steady. Altogether there are very few new features to report. Egg albumen continues very firm and prices have advanced. There has been no change in gambier, the market for which holds very firm. We publish an editorial on another page of this issue giving the statistical position of the article. Aniline oil and salt are firm. Yellow prussiate of potash is unchanged at the lower range noted in last week's report. Corn starch and dextrine are in very fair demand and the market is steady. We give below the final estimate of this season's indigo crop.

ALBUMEN.—Supplies of egg albumen on spot are extremely light and, according to advices from abroad, none is offered in foreign markets. There are some shipments due shortly, but we are told that the stuff has been nearly all sold to arrive. Quotations are generally higher, as follows:—Egg albumen, Chinese, 50@55c.; European, 60@70c.; blood albumen, 14@20c., as to quality and holder.

ANILINE OIL.—There is nothing to add to previous reports regarding the aniline oil situation. The market is firm, but without new features. Former quotations of 9@9½c., as to quantity, are still correct.

ANILINE SALT.—The market is very firm at the advance noted in our last report. The article continues very scarce and in demand. Prices are without change on the basis of previous quotations of 9@9½c., as to quantity. The short supply interferes with business.

BICHLORIDE OF TIN.—The movement of all tin solutions is not particularly heavy and the demand for bichloride is no exception, only jobbing quantities being involved in current transactions. Prices are without change from the basis of previous quotations and are repeated as follows:—50 deg., 8¾@9c.; 60 deg., 11½@11¾c.

BICHROMATES.—The same steady feeling prevails. While the volume of business is fair, no large single transactions are reported. Manufacturers are firm in their views and are doing business at former current quotations of 8¼@8½c. for bichromate of potash and 6¼@6½c. for bichromate of soda, subject to the provisions of the new schedule.

CUTCH.—Very little interest is accorded the market, which continues dull and without a single new feature. Previous quotations are repeated as follows:—Mat, 5@5½c.; refined, 5@6c; refined in boxes, 5¾@6c.; slabs in boxes, 8@10c. The shipments from Rangoon from January 1 to October 20, to all parts, were 2,750 tons, against 3,600 tons in 1901 and 5,230 tons in 1900.

DEXTRINE.—There has been a fairly steady demand for dextrine during the week, but the situation contains no features which call for special comment. Prices for all grades keep steady on the basis of previous quotations, which are repeated as follows:—Imported potato dextrine, 5½@7c.; domestic, 5¾@6½c.; corn dextrine, 3½@4c.

DIVI-DIVI.—Current transactions do not exceed jobbing proportions and involve only such lots as are needed for present requirements. There have been no arrivals worthy of note this week, only about 160 bags, and the market keeps steady at $43@45 per ton, on account of light supply.

GAMBIER.—The statistical position of this article is given in an editorial which will be found on another page of this issue. As regards market conditions there is very little to add to previous reports. The same firmness is apparent, and the consuming demand holds good. There has been no change in the store prices from the basis of former quotations of 6¼@7c. The steamers discharging at present are the Asama, 6,149 bales, and 183 bales cube; the Atholl, 9,532 bales, and the Seneca, 3,096 bales. These goods are held at about 6c. ex dock.

HYPOSULPHITE OF SODA.—There has been no change in local market conditions, which continue in the same quiet to steady way without offering any particular feature. Prices are steady on the basis of previous quotations, as follows:—American, in casks, 1.60@1.65c.; in kegs, 1.70@1.75c.; German, in casks, 1.70@2c.; in kegs, 1.90@2.30c.

INDIGO.—The situation offers nothing new with which to supplement previous reports. The market continues quiet and steady at last quoted prices, which are repeated as follows:—Bengal, low grade, 65@70c.; medium, 70@80c.; high grade, 90c.@$1.10; Kurpahs, medium to good, 55@60c.; higher grade, 65@75c.; Guatemala, 55@75c.; Manila, 48@55c. Moran & Co.'s Calcutta circular says:—

We are now in a position to hand you our final estimate of this season's indigo crop, amounting to a total of 45,000 mds., against a total out-turn of 85,070 mds. last season, and 111,670 mds. the season before. We make no change in our estimate for Lower Bengal, which we think may be accepted as about correct. Manufacture in Behar is now practically closed. The out-turn from Khoontees has been most disappointing, heavy rains-floods, followed by poor produce, being accountable for it. Moisture for next season is fully secured. As it is somewhat difficult to obtain reliable information as to the out-turn of the Benares and Northwest districts, we can only frame our estimates on the information we have received and the Government report on the decreased area under cultivation, and it is therefore approximate. The season closes with the smallest total crop on record. The Government report of the Madras crop gives the total area under indigo cultivation in that presidency as 98,000 acres, against 165,000 acres last season, and the reason given, as to the cause, being last year's low prices and unfavorable weather. The crop is reported to be fairly good, but we are informed that the out-turn will not exceed half of that of the previous year.

NUTGALLS.—There are no new features to the situation. Demand for both blue Aleppo and Chinese galls is not heavy and the market is more or less easy. This is particularly so in the case of the former variety, prices for which are nominal. Quotations are repeated as follows:—Blue Aleppo galls, 13½@14c.; Chinese galls, 14@14½c.

PRUSSIATES.—Demand for yellow prussiate of potash continues very fair at the lower range of prices noted in our last report, and we are told that some contracts have been made at 13¼c For spot goods former quotations of 13½@13¾c. are still current. Prussiate of soda is moving quietly and the market is fairly steady at former prices, but presents no features of interest. Quotations are 11@12c., as to quantity.

STARCH.—Dealers report a fair demand for all grades of starch coming under the head of dyestuffs, and the market for these kinds keeps firm at former prices. There are no new features to note, however, in connection with the situation. Quotations are repeated, without change, as follows:—Corn, pearl, in barrels, 2.62@3½c.; in bags, 2.72@4c., as to brand and quantity; potato starch, 3¾@4c.; rice, 7½@9c.; wheat, 4½@5c.

SUMAC.—Demand for Sicily sumac is fair, but involves no large quantities. The market remains steady, as previously reported, and nothing has occurred to in any way affect the situation. There has been no change in prices from the basis of previous quotations, which are repeated as follows:—Sicily, No. 1, $48@50; No. 2, $42@45; Virginia, $33@34.

TAPIOCA AND SAGO FLOUR.—There is nothing new in the market nor any special features to report beyond the situation as previously stated. Both tapioca and sago flour are steady upon the basis of previous quotations as follows:—Tapioca flour, 2¾@3c.; sago flour, 3⅛@3¼c.

TIN CRYSTALS.—The market for tin crystals offers nothing new. Demand is fairly moderate for the season and there is no particular feature to disturb existing conditions. Quotations are repeated as follows:—Barrels, 22c.; kegs, 22c.; jars, 23c.

ZINC DUST.—The same quiet to steady market prevails and the situation is without material change one way or the other. Prices are still quoted at 5@5½c.

Imports and Exports.

Below we give a summary statement of the imports and exports of the United States for the nine months ending September 30, 1902, compiled by the Bureau of Foreign Commerce at Washington. We also give the same information for the corresponding period of last year for comparison:—

IMPORTS.

	1901.	1902.
Alizarine and alizarine colors, lbs	4,145,418	3,343,100
Argols or crude tartar, lbs	22,503,379	22,823,260
Asphaltum, or bitumen, crude, tons	109,851	111,021
Bark, hemlock, cords	19,757	16,683
Bark, cinchona or other quinine, lbs	3,444,176	2,921,525
Bristles, lbs	1,888,881	1,746,719
Brushes	$861,609	$853,877
Cement, lbs	244,745,623	422,429,714
Clay of all kinds, tons	132,395	149,930
Coal tar colors and dyes	$3,239,774	$3,718,782
Cochineal, lbs	84,922	86,171
Cocoa, crude, etc., lbs	39,022,771	40,514,675
Corks, mfrs. of	$516,981	$470,463
Corkwood, or cork bark, manufactured	$1,400,207	$1,524,434

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HOFFMAN'S ANODYNE
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Cutch and gambier, lbs..	22,741,015	23,881,292
Dyewood, extract, etc..	2,173,783	2,556,985
Glass bottles, etc., empty or filled.....	$375,072	$360,985
Glass, cylinder, crown, etc., unpolished, lbs...	21,181,022	43,524,403
Glass, cylinder and crown, polished, unsilvered, square feet...	1,602,040	1,306,739
Glass, cylinder and crown, polished, silvered, square feet.....	622	5,663
Glass, plated, fluted, rolled or rough, square feet	39,029	250,382
Glass, plate, cast, polished, unsilvered, sq. feet	3,243,925	3,143,040
Glass, plate, cast, polished, silvered, square feet	14,416	4,207
Glass, all other.....	$1,686,643	$1,807,703
Glue, lbs	3,321,580	3,798,543
Glycerine, lbs	17,266,882	20,764,154
Grease and oils.....	$308,717	$434,643
Grease	$296,936	$305,248
Guano, tons	2,353	5,301
Gum arabic, lbs.....	2,273,602	3,506,881
Gum camphor, cde., lbs.	1,519,651	1,615,555
Gum chicle, lbs.....	3,279,494	3,032,337
Gum, copal and kauri, lbs	11,285,137	16,734,924
Hops, lbs	1,351,667	1,506,260
Indigo, lbs	3,011,786	2,878,279
Lead, pigs, bars, etc., lbs	288,220	4,350,762
Lead in ore, lbs.....	172,027,087	121,359,586
Licorice root, lbs.....	90,650,106	77,127,089
Lime, chloride of, or bleaching powder, lbs.	$1,091,413	87,358,467
Linseed or flaxseed, bu..	1,726,756	.....
Logwood, tons	32,268	44,422
Other dyewoods	$114,353	$283,391
Mineral waters, all not artificial, gals	1,373,847	1,483,560
Nutmegs, lbs	1,634,936	1,121,859
Oil, mineral, gals.....	1,607,133	3,015,280
Oil, whale and fish, gals	515,092	496,208
Oil, other animal, gals..	69,190	144,730
Oils, volatile or essential	$1,488,159	$1,726,111
Oil, olive, gals.....	911,994	1,137,543
Oil, other fixed.....	$2,908,475	$5,244,765
Opium, crude, lbs.....	386,297	369,938
Opium, prepared, lbs....	109,615	157,120
Paints and colors.....	$1,135,098	$1,328,265
Pepper, lbs	11,606,714	11,533,013
Perfumery, cosmetics, etc	$397,494	$525,355
Phosphates, crude, tons.	119,558	75,727
Other fertilizers	$862,415	$706,540
Plumbago, tons	11,213	13,738
Potash, chlorate of, lbs.	588,143	925,932
Potash, muriate of, lbs.	74,839,765	51,117,738
Potash, nitrate of, or saltpeter, crude, lbs...	8,249,295	9,239,816
Potash, all other, lbs....	38,193,987	49,840,770
Quinine, all salts of, ozs	2,303,517	2,158,446
Shellac, lbs	8,569,186	7,752,343
Soap, fancy, perfumed and all toilet, lbs.....	673,834	754,495
Soap, all other.....	$253,550	$308,527
Soda, ash, lbs.....	19,472,387	20,163,211
Soda, caustic, lbs.....	2,604,561	2,546,260
Soda, nitrate of, tons...	152,518	147,980
Soda, sal., lbs.....	3,288,258	3,027,844
Soda, other salts of, lbs.	10,540,298	11,407,003
Spirits, proof, gals.....	1,503,931	1,601,355
Sponges	$10,223,906	$10,618,420
Sulphur or brimstone, crude, tons	119,481	131,449
Sulphur ore, tons.....	303,286	335,941
Sumac, ground, lbs.....	5,376,434	7,423,602
Vanilla beans, lbs.....	189,717	350,079
Zinc, in pigs, lbs.....	936,756	945,665
Exports of Domestic Merchandise.		
Acids	$150,353	$181,781
Acetate of lime, lbs....	42,112,156	47,482,179
Alcohol, proof, gals.....	254,916	276,572
Alcohol, wood, gals.....	560,760	698,976
Ashes, pot and pearl, lbs	879,724	1,317,721
Baking powder, lbs.....	613,619	911,842
Bark and extract for tanning	$279,591	$173,129
Beeswax, lbs	112,915	74,543
Candles, lbs	1,965,527	3,177,006
Cement, bbls	276,089	276,692
Copper, sulphate of, lbs.	47,081,121	29,908,104
Cork, mfrs. of.....	$22,473	$39,666
Cottonseed, lbs	27,874,811	41,705,186
Dyes and Dyestuffs.....	$300,068	$437,630
Flaxseed, bu	418,677	485,522
Ginseng, lbs	80,951	55,504
Glass, window	$37,259	$30,954
Glass, all other.....	$1,541,422	$1,467,506
Glucose, or grape sugar, lbs	127,401,672	78,647,713
Glue, lbs	2,152,930	2,226,200
Grease and all soap stock	$2,375,386	$1,656,417
Gunpowder, lbs	1,127,442	1,227,334
Hops, lbs	3,623,985	4,008,360
Lampblack	$269,357	$194,390
Lard, lbs	459,606,787	367,450,314
Lead, pigs, bars, etc., lbs	4,725,407	6,475,322
Lime, bbls	20,245	29,654
Matches	$54,160	$43,146
Medicines, patent or proprietary	$2,408,573	$2,279,593
Naphthas, including all lighter products, gals..	15,033,793	14,868,088
Oil, cake, cottonseed, lbs	777,235,839	606,265,440
Oil, cake, linseed, lbs...	354,592,417	433,598,774
Oil, corn, gals.....	3,367,704	2,724,827
Oil, cottonseed, gals.....	34,168,475	2,047,528
Oil, fish, gals.....	825,143	570,330
Oil, illuminating, gals..	607,783,508	575,790,062
Oil, land, gals.....	464,464	300,000
Oil, linseed, gals.....	68,865	68,663
Oil, lubricating, gals....	54,816,586	60,497,023
Oil, mineral, crude, gals.	94,567,859	104,823,868
Other fertilizers	9,799	11,055
Oil, mineral, residuum, bbls	525,218	692,109
Oil, peppermint, lbs.....	33,228	14,862
Oil, other essential.....	$113,536	$155,430
Oil, other vegetable....	$264,998	$146,990
Oil, other animal, gals..	432,232	105,965
Oil, whale, gals.....	7,757	26,246
Oleo oil, lbs.....	126,242,218	80,471,804
Oleomargarine, lbs	4,087,467	4,904,021
Paints and colors.....	$1,569,481	$1,661,164
Paraffine wax, lbs.....	84,752,069	118,759,901
Perfumery and cosmetics	$295,536	$256,391
Phosphate, crude, tons..	576,483	597,114
Quicksilver, lbs	589,753	702,439
Rosin, lbs	2,095,011	1,984,830
Roots, herbs and bars, n. e. s.....	$220,504	$217,160
Soap, toilet or fancy....	$386,308	$377,359
Soap, all others, lbs....	23,649,825	24,754,976
Spermaceti, lbs	186,921	230,336
Spirits turpentine, gals..	15,552,522	13,891,895
Starch, lbs	61,003,946	16,008,163
Tallow, lbs	40,997,401	15,837,363
Tar, lbs	25,429	26,511
Turpentine & pitch, bbls	11,859	14,047
Varnish, gals	452,241	464,133
Washing powders	1,151,600	3,412,070
Whalebone, lbs	145,631	87,248
Zinc, oxide of, lbs.....	6,814,881	7,689,184

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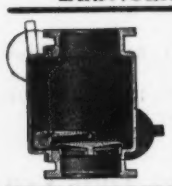

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